# NATIONAL PARKS PORTFOLIO

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UNITED STATES
DEPARTMENT OF THE INTERIOR
RAY LYMAN WILBUR, Secretary

NATIONAL PARK SERVICE
HORACE M. ALBRIGHT, Director

# THE NATIONAL PARKS PORTFOLIO

BY

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SIXTH EDITION

REVISED BY

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# FOREWORD

WHEN the first edition of the National Parks Portfolio was issued in 1916, comparatively few people realized the importance and value of the national parks in our national scheme of existence; very few, in fact, knew how many of these reservations there were or where located. The national monuments were practically unknown.

In the past fifteen years, however, great changes have occurred in the national-park and monument system. Whereas in 1916 only 356,097 people visited the national parks, in 1930 a total of 2,774,561 saw these areas, and an additional 472,095 visited the national monuments. And the millions who have not yet visited these areas learn about them through illustrated lectures, books, and magazine and newspaper stories.

In this space of time great changes also have taken place in the administration and development of the parks and monuments. In the earlier years attention necessarily was given to the upbuilding of administrative units and the development of the necessary accommodations to care for the physical well-being of visitors.

Now, this preliminary work having been accomplished, the greatest development in the system is along esthetic and educational lines, and the benefit to visitors has increased accordingly.

To Stephen T. Mather, first Director of the National Park Service, is due the greater part of the successful development of the national park and monument system.

The issuance of the first National Parks Portfolio in 1916 was his personal accomplishment. No Government funds were available for such a publication. Mr. Mather, however, knew that some such book was necessary if the parks were to be made known to the people of the United States. He, therefore, interested seventeen western railroads in the project and with their contribution of forty-three thousand dollars had the National Parks Portfolio prepared and published.

A year later the Government took over the publication of the Portfolio. It is now in its sixth edition and gives representation to the twenty-two national parks and thirty-four national monuments included in the system.

HORACE M. ALBRIGHT,
*Director, National Park Service.*

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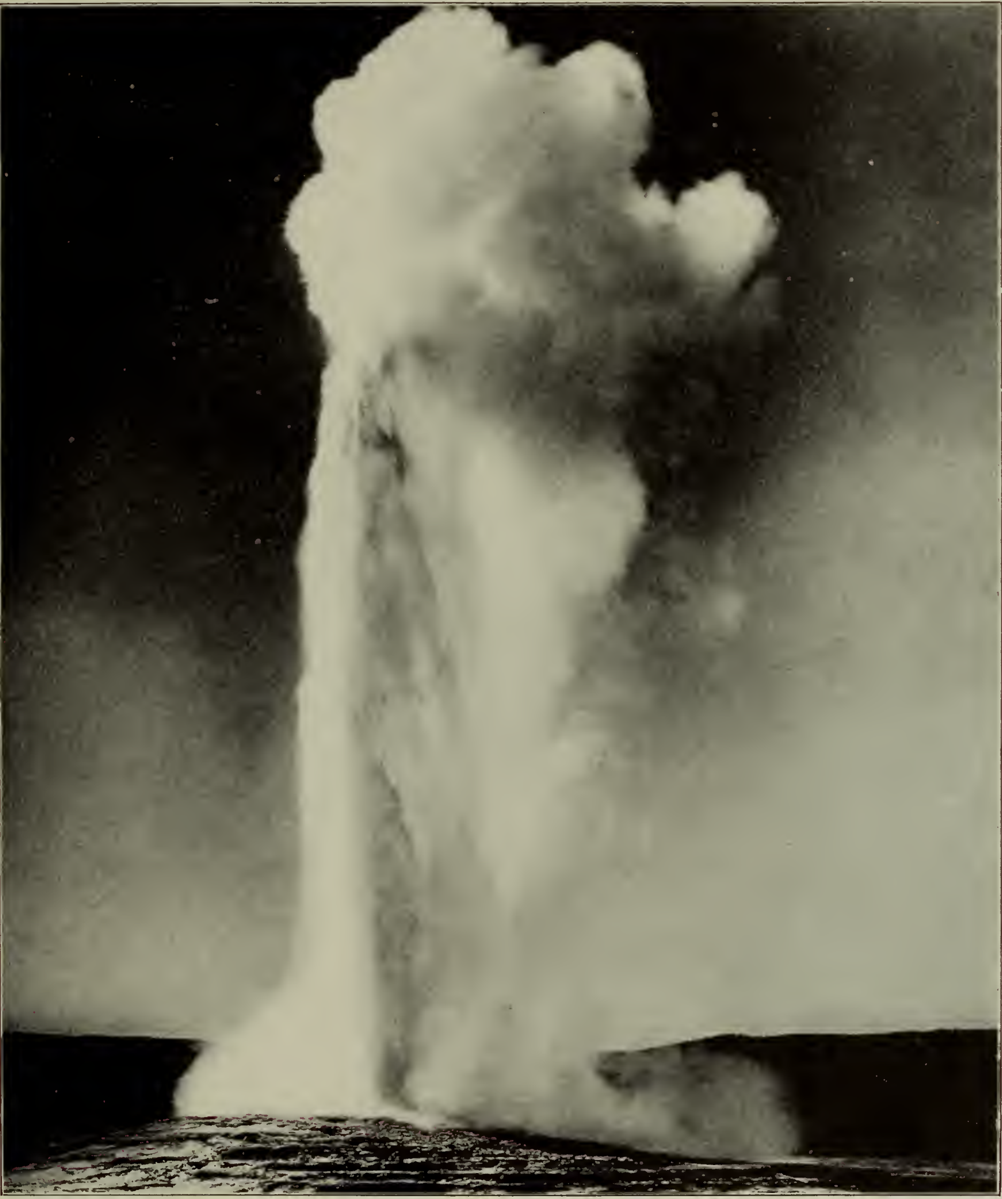
# DIFFERENCE BETWEEN A NATIONAL PARK AND A NATIONAL MONUMENT

THE two classes of reservations comprising the national-park and national-monument system differ primarily in the reasons for which they are established. National parks are areas set apart by Congress for the use of the people of the United States generally, because of some outstanding scenic feature or natural phenomena. Although many years ago several small parks were established, under present policies national parks must be sufficiently large to yield to effective administration and broad use. The principal qualities considered in studying areas for park purposes are their inspirational, educational, and recreational values.

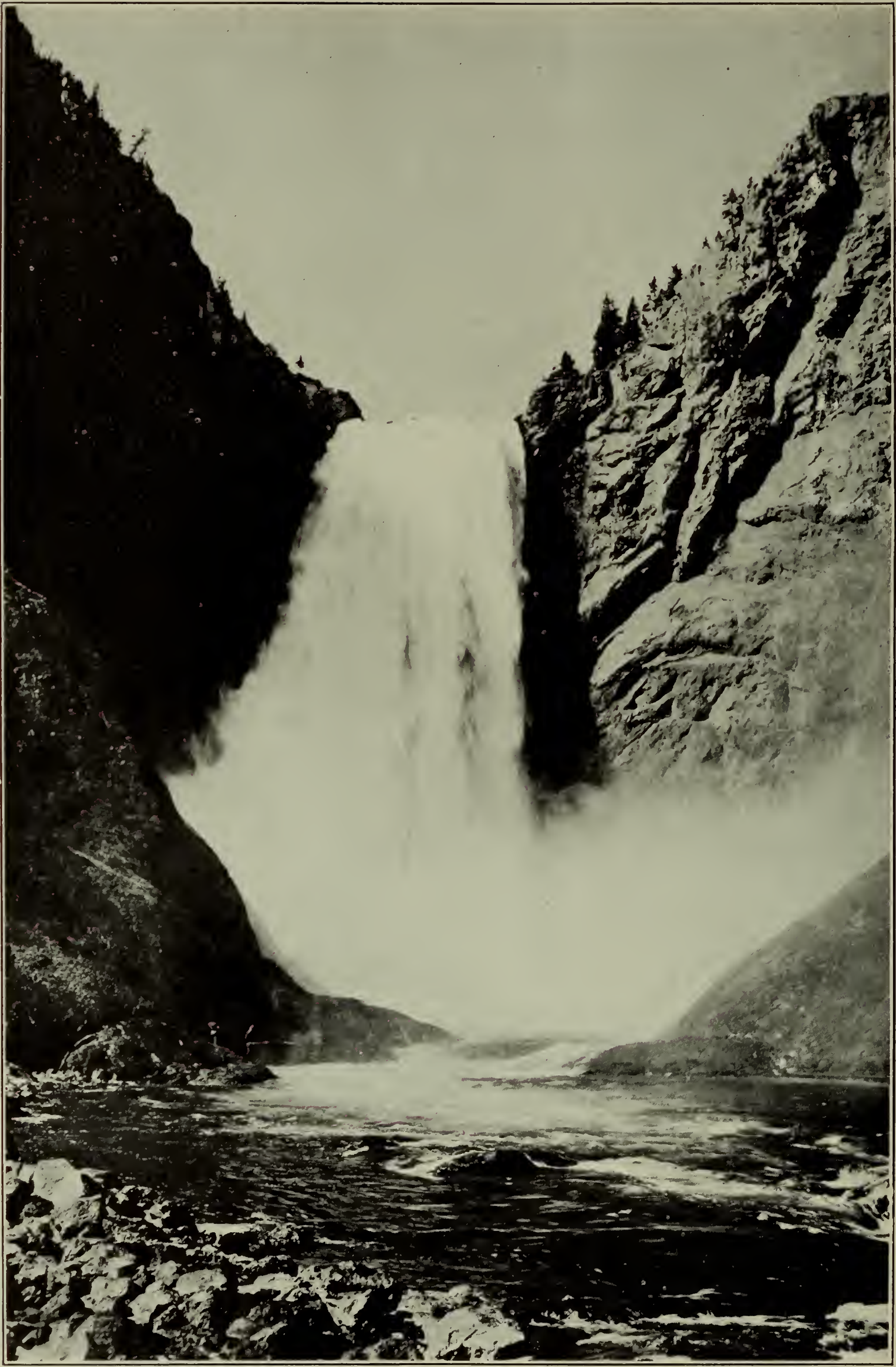
National monuments, on the other hand, are areas reserved by the National Government because they contain objects of historic, prehistoric, or scientific interest. Ordinarily established by presidential proclamation under authority of Congress, occasionally these areas also are established by direct action of Congress. Size is unimportant in the case of the national monuments.

A few of the national monuments are under the supervision of the Forest Service of the Department of Agriculture because they are located within national forests, and several others are administered by the War Department because of their military significance. The majority of them, however, are administered by the National Park Service of the Department of the Interior, and only these latter are considered in this book.



*Photograph by J. E. Haynes, St. Paul* *OLD FAITHFUL*

# YELLOWSTONE NATIONAL PARK



*Photograph by J. E. Haynes, St. Paul*

The Great Falls of the Yellowstone, Nearly Twice as High as Niagara

Below these falls the river enters the gorgeously colored Grand Canyon of the Yellowstone

*Copyright by W. S. Berry*

ANTELOPE

# THE LAND OF WONDERS

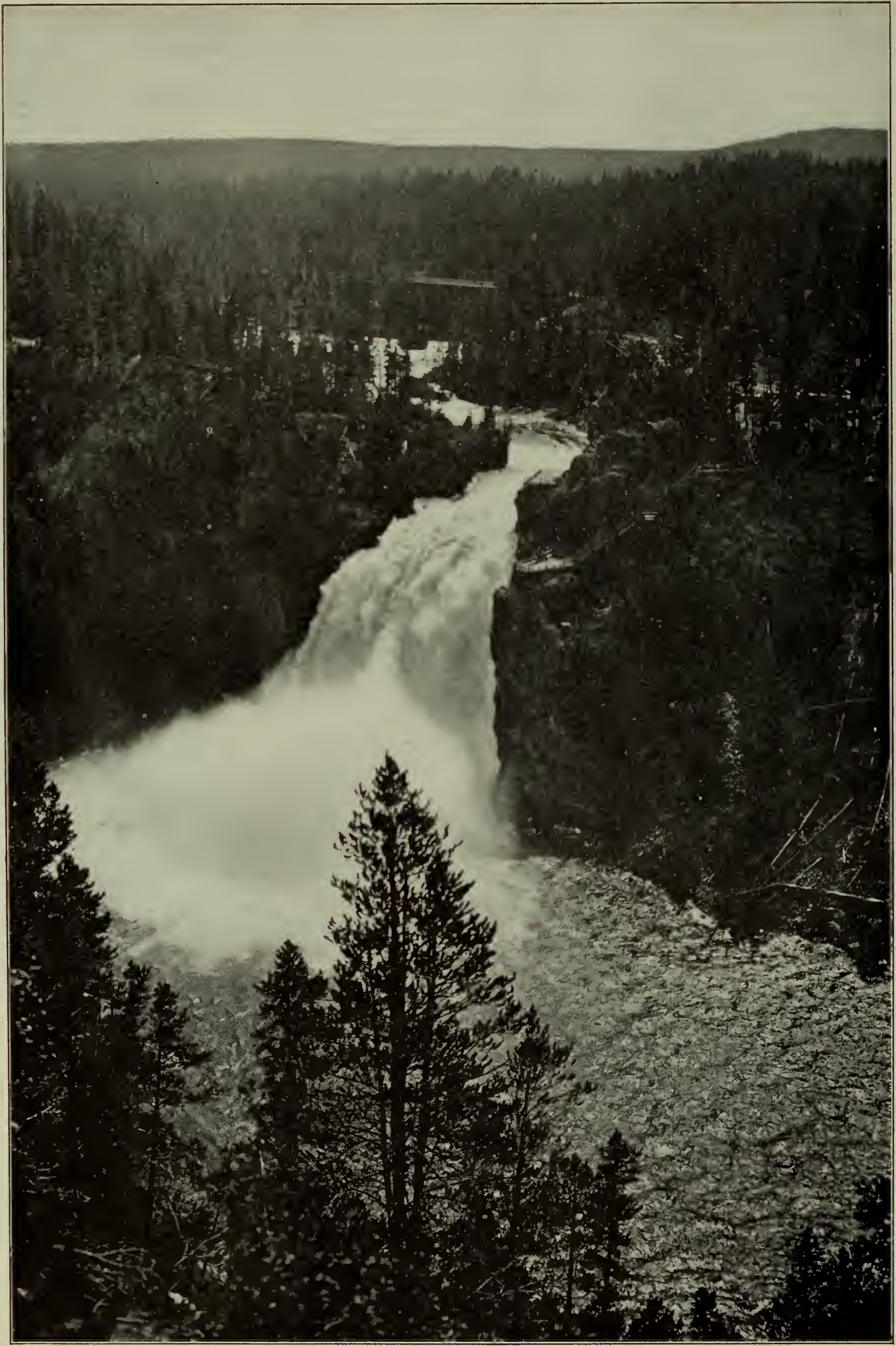
THE Yellowstone National Park is the largest and most widely celebrated of our national parks. It is a wooded wilderness of over thirty-four hundred square miles. It contains more geysers than are found in the rest of the world together. It has innumerable boiling springs whose steam mingles with the clouds.

It has many rushing rivers and large lakes. It has waterfalls of great height and large volume. It has fishing waters unexcelled.

It has canyons of sublimity, one of which presents a spectacle of broken color unequaled. It has areas of petrified forests with trunks standing. It has innumerable wild animals which have ceased unduly to fear man; in fact, it is unique as a bird and animal sanctuary.

It has several great hotels and lodges, and also many free public automobile camp grounds. It has a good road system.

In short, it is not only the wonderland that common report describes; it is a fitting playground and pleasure resort of a great people; it is also an ideal summer school of nature study.



*Photograph by George R. King*

THE UPPER FALLS OF THE YELLOWSTONE, A FEW MILES BELOW YELLOWSTONE LAKE

Above these falls the rushing river lies nearly level with surrounding country; below begins the canyon

*Copyright by J. E. Haynes, St. Paul*

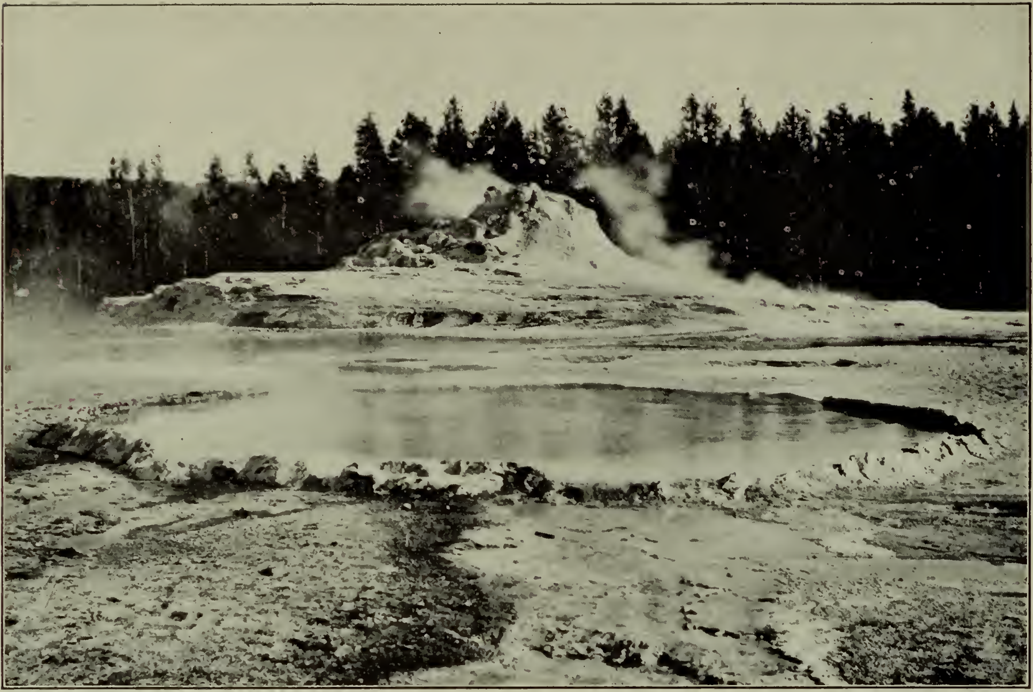
Rapids Above Upper Falls

# THREEFOLD PERSONALITY

THE Yellowstone is associated in the public mind with geyers only. Thousands even of those who, watches in hand, have hustled from sight to sight over the usual stage schedules, bring home vivid impressions of little else.

There never was a greater mistake. Were there no geysers, the Yellowstone watershed alone, with its glowing canyon, would be worth the national park. Were there also no canyon, the scenic wilderness and its incomparable wealth of wild-animal life would be worth the national park.

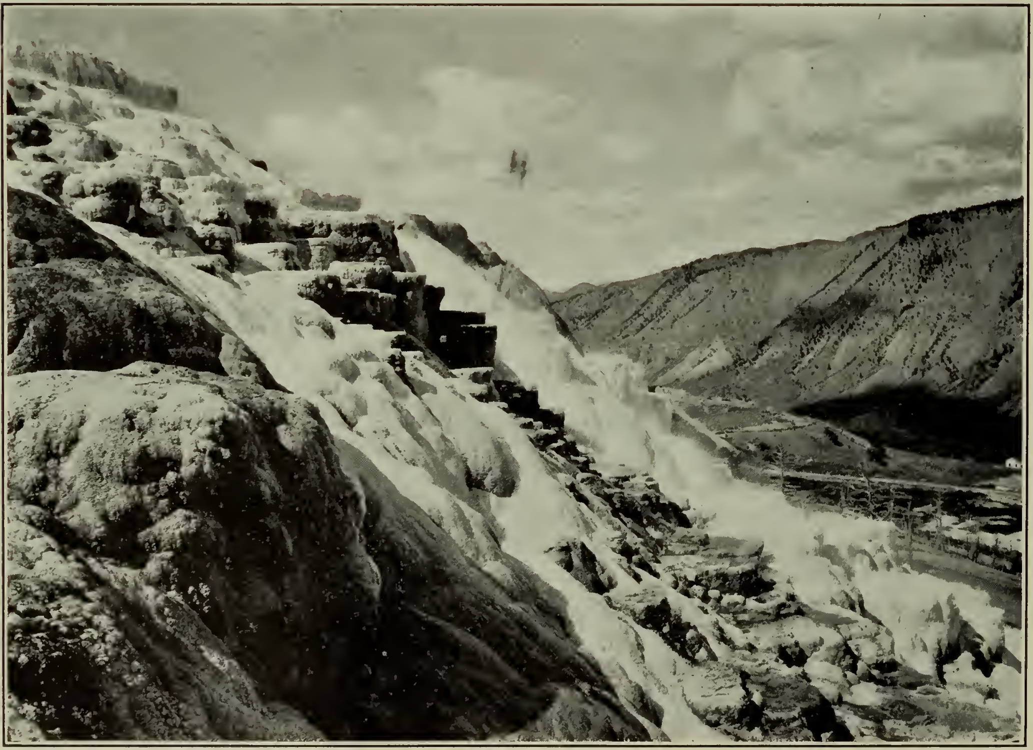
The personality of the Yellowstone is threefold. The hot-water manifestations are worth minute examination, the canyon a contemplative visit, the park a summer. Dunraven Pass, Mount Washburn, the canyon at Tower Falls, Shoshone Lake, Sylvan Pass—these are known to very few indeed. See all or you have not seen the Yellowstone.



*Photograph by J. E. Haynes, St. Paul*

CRESTED POOL, ONE OF THE INNUMERABLE HOT SPRINGS

These springs, whose marvelously clear water is a deep blue, have an astonishing depth



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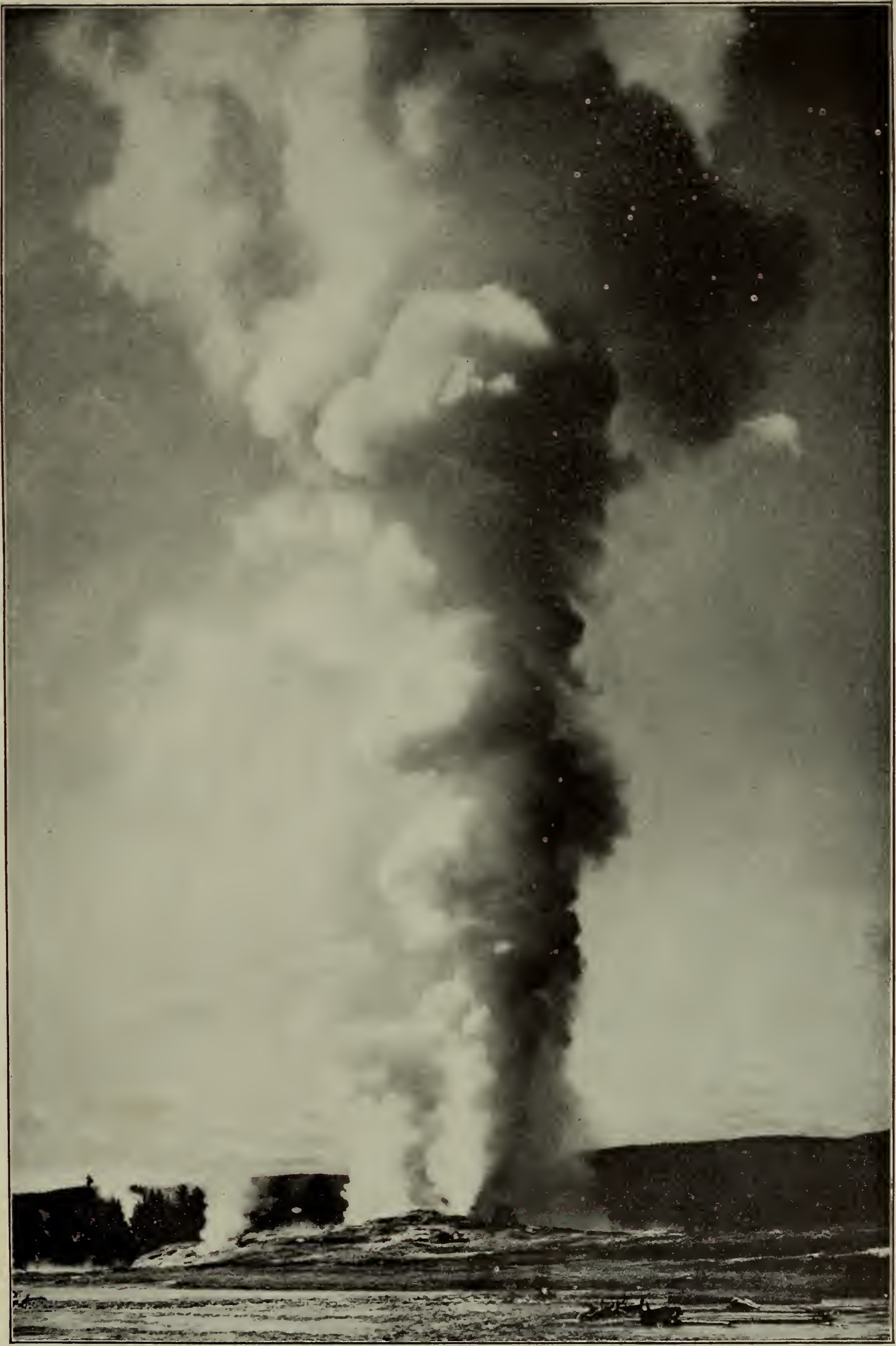
THE CARVED AND FRETTED TERRACES AT MAMMOTH HOT SPRINGS

These great white hills, deposited and built up by the hot waters, sometimes envelope forest trees



*Photograph by J. E. Haynes, St. Paul*

THE GIANT GEYSER, IN MANY RESPECTS THE GREATEST OF ALL

It spouts for an hour at a time, the water reaching a height of 250 feet. Interval, four to sixteen days

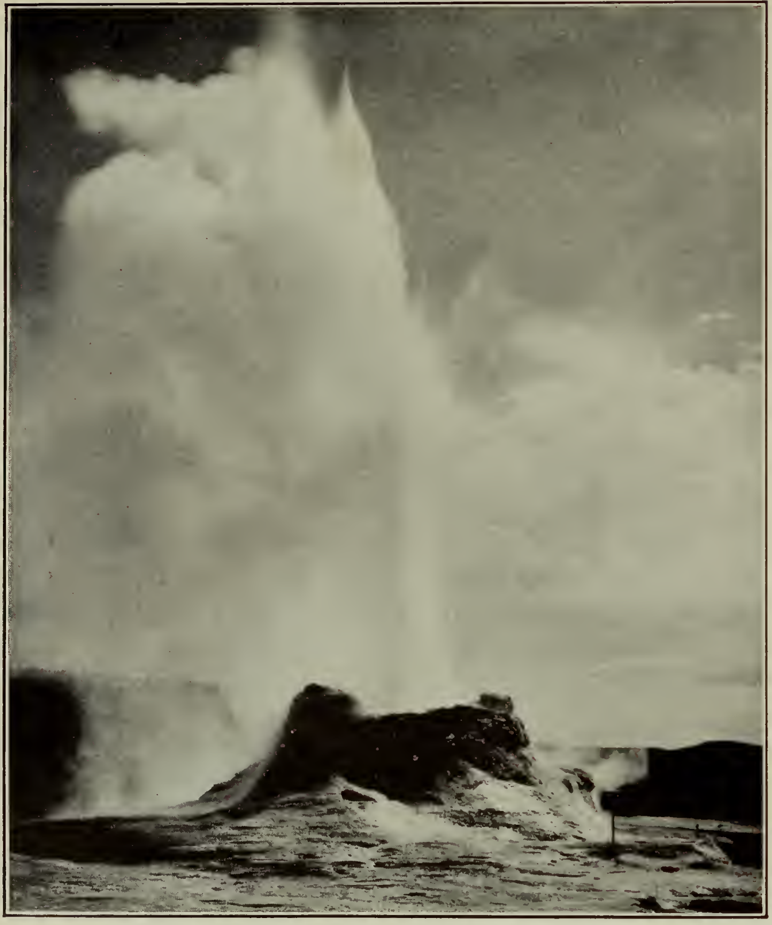
*Copyright by J. E. Haynes, St. Paul*

THE NORRIS GEYSER BASIN

# GEYSERS SPOUT AND STEAMING VAPORS RISE

THE first view of the geyser basins affords a sensation never to be forgotten. Early explorers imagined they smelled brimstone. Early lecturers were hissed and sometimes even stoned in the streets as imposters. Certainly the imaginative beholder acquires thrills he never before experienced.

There are more than forty geysers accessible in the three large basins on the west side. Some spout every few seconds, some every few minutes, others at intervals of hours or days, a few at irregular intervals of weeks. The eruptions vary from several feet to two hundred and fifty feet. But the whole region bubbles and hisses and steams. Geysers occur where the earth's internal heat approaches its surface.



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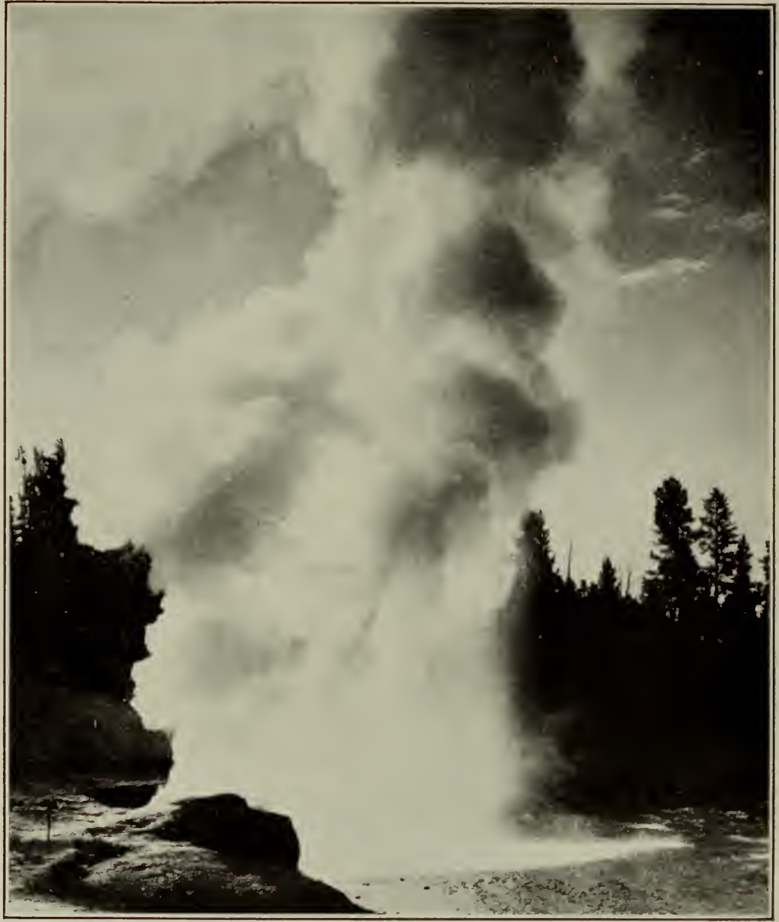
Castle Geyser, so Named Because of Its Symmetrical Cone



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The Lively Riverside Geyser Which Plays Every Few Hours

J. E. HAYNES, ST. PAUL

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THE CAMP FIRE WHERE TRUE WESTERN THRILLERS ARE TOLD

# MANY-COLORED CANYON

FROM Inspiration Point, looking a thousand feet almost vertically down upon the foaming Yellowstone River, and southward three miles to the Great Falls, the hushed observer sees spread before him a most glorious panorama. The steep slopes are inconceivably carved by the frost and the erosion of the ages. Sometimes they lie in straight lines at easy angles, from which jut high rocky prominences. Sometimes they seem carved from the side walls. Here and there jagged rocky needles rise perpendicularly like groups of gothic spires.

And the whole is colored as brokenly and vividly as the field of a kaleidoscope. The whole is streaked and spotted in every shade from the deepest orange to the faintest lemon, from deep crimson through all the brick shades to the softest pink, from black through all the grays and pearls to glistening white. The greens are furnished by the dark pines above, the lighter shades of growth caught here and there in soft masses on the gentler slopes and the foaming green of the plunging river so far below. The blues, ever changing, are found in the dome of the sky overhead.

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SYLVAN LAKE, BELOW SYLVAN PASS, CODY ROAD

*Copyright by Gifford*

VIEW FROM MOUNT WASHBURN SHOWING YELLOWSTONE LAKE IN DISTANCE

The northern east side is a country of striking and romantic scenery made accessible by excellent roads

*Photograph by J. E. Haynes*

THE HOLY CITY FROM THE CODY ROAD, EASTERN ENTRANCE

*Photograph by J. E. Haynes*

ENTERING YELLOWSTONE FROM THE SOUTH—LEWIS FALLS

*Copyright by J. E. Haynes*

UNIQUE GROTTO GEYSER FORMATION

*Photograph by J. E. Haynes*

BEAUTIFUL GIBBON FALLS IN THE GIBBON RIVER

*Copyright by J. E. Haynes, St. Paul*

A GRIZZLY BEAR AND HER CUBS

*Photograph by Albert Schlechien*

IT IS THE NATURAL HOME OF THE CELEBRATED BIGHORN, THE ROCKY-MOUNTAIN SHEEP

*Photograph by G. Swanson*

DEER MAKE UNEXPECTED SILHOUETTES AT FREQUENT INTERVALS

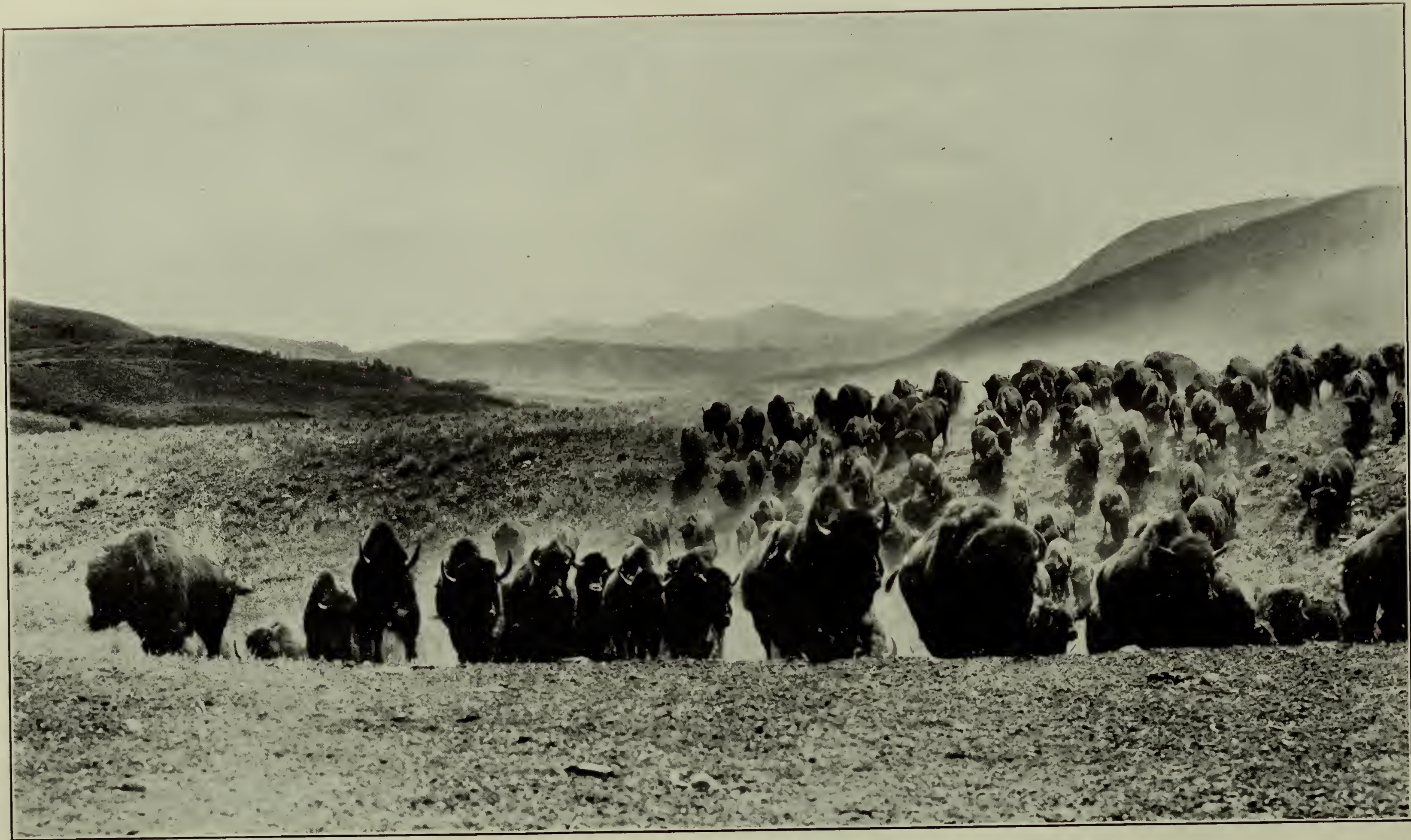
# GREATEST ANIMAL REFUGE

THE Yellowstone National Park is one of the largest and most important game preserves in the world. Since it was established in 1872 hunting has been strictly prohibited, and elk, bear, deer, antelope, bison, moose, and bighorn mountain sheep roam the valleys and mountains in large numbers. Fourteen thousand elk, for instance, live in the park. Antelope, nearly extinct elsewhere, here abound.

These animals have long since ceased to fear man as wild animals do everywhere except in our national parks. While few tourists see them who follow the beaten roads in the everlasting sequence of stages, those who linger in the glorious wilderness see them in an abundance that fairly astonishes.

*Photograph by S. N. Leek*

IN WINTER WHEN SNOWS ARE DEEP PARK RANGERS LEAVE HAY IN CONVENIENT SPOTS



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Yellowstone's Buffalo Herd in Full Stampede is a Thrilling Sight

# ANIMALS REALLY AT HOME

*Photograph by Edward S. Curtis*

Unlike the Grizzly, the Black Bear Climbs Trees Quickly and Easily

VERY different, indeed, from the beasts of the after-dinner story and the literature of adventure are the wild animals of the Yellowstone. Never shot at, never pursued, they are comparatively as fearless as song birds nestling in the homestead trees.

Wilderness bears cross the trail without haste a few yards ahead of the solitary passer-by, and his accustomed horses jog on undisturbed. Deer by scores lift their antlered heads above near thickets to watch his passing. Elk scarcely slow their cropping of forest grasses. Even the occasional moose, straying far from his southern wilderness, scarcely quickens his trot. Herds of antelope on near-by hills watch but hold their own.

Only the grizzly and the mountain sheep, besides the predatory beasts, still hide in the fastnesses. But even the grizzly now comes to the bear feeding ground and the mountain sheep loses fear and joins the others in winters of heavy snow when park rangers scatter hay by the roadside.

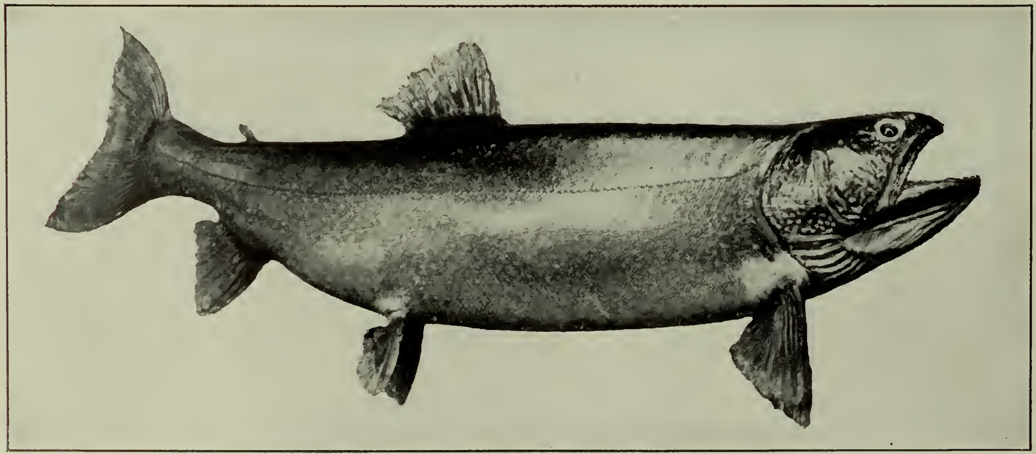
*Photograph by S. N. Leek*

# THE PARADISE OF ANGLERS

THE Yellowstone is a land of splendid rivers. Three watersheds find their beginnings within its borders. From Yellowstone Lake flows north the rushing Yellowstone River with its many tributaries; from Shoshone, Lewis, and Heart Lakes flows south the Snake River; and in the western slopes rise the Madison and its many tributaries. All are trout waters of high degree.

The native trout of this region is the famous cutthroat. The grayling is native in the Madison River and its tributaries. Others have been planted.

Besides the stream fishing, which is unsurpassed, the lakes, particularly Shoshone Lake and certain small ones, afford admirable sport.



*Photograph by J. E. Haynes, St. Paul*

A BIG LAKE TROUT FROM SHOSHONE LAKE

The game cutthroat is the commonest trout in the Yellowstone, but there are six other varieties

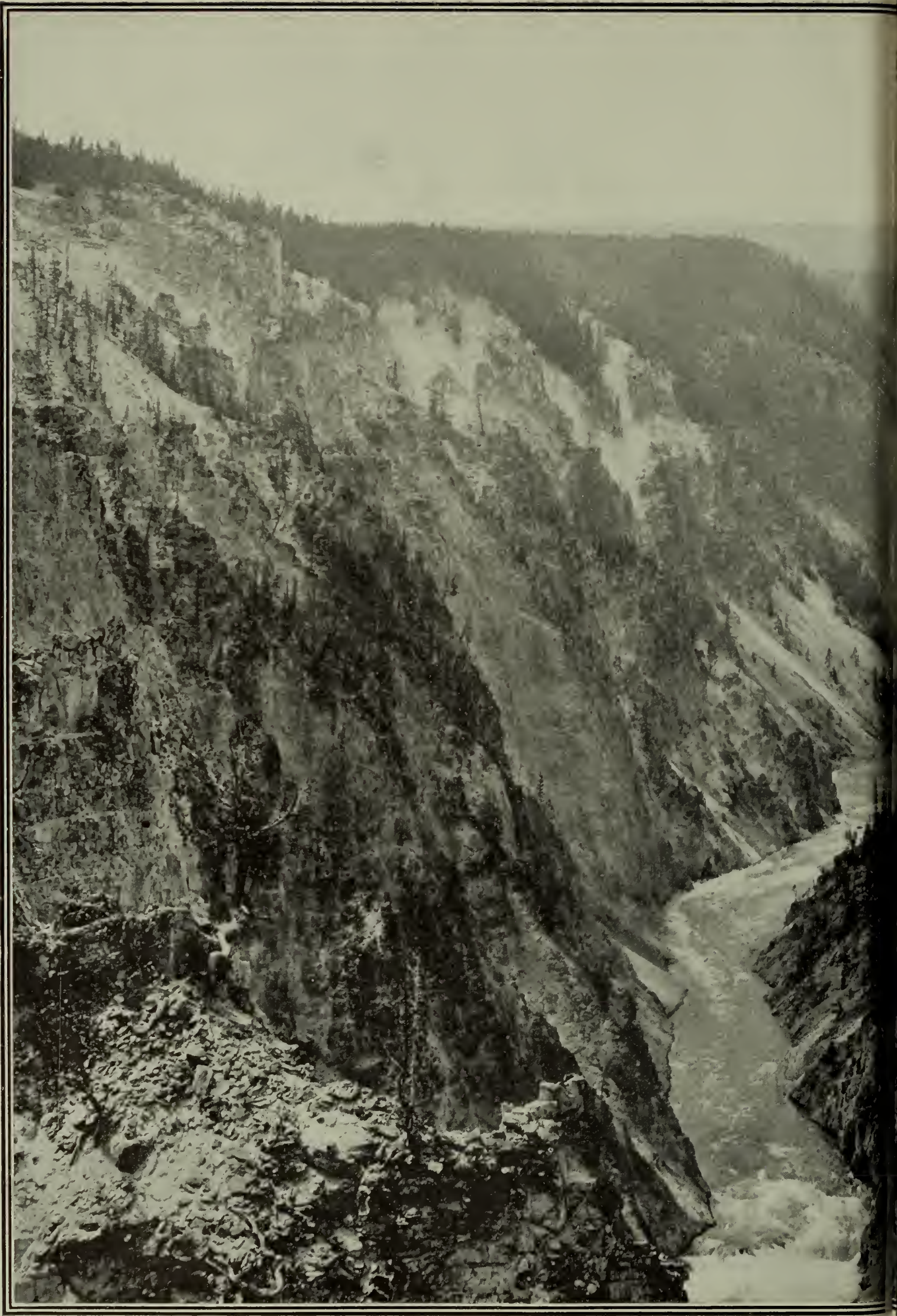
*Photograph by J. E. Haynes, St. Paul*

CUTTHROATS FROM ONE TO THREE OR FOUR POUNDS ARE TAKEN IN LARGE NUMBERS AT THE YELLOWSTONE LAKE OUTLET

***Copyright by Gifford***

YOUNG PELICANS ON MOLLY ISLAND IN YELLOWSTONE LAKE

The Yellowstone pelicans are very large and pure white, a picturesque feature of the park



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Standing Upon Artist Point, Which Pushes Out Almost over the Foaming River,
Before You in a Glorious

OUSAND FEET BELOW, THE INCOMPARABLE CANYON OF THE YELLOWSTONE WIDENS
IDOSCOPE OF COLOR

*Copyright by J. E. Haynes*

Party Being Conducted Over Mammoth Hot Springs Formations

*Copyright by J. E. Haynes*

Auto Camp, Mammoth Hot Springs, Yellowstone Park

*Copyright by J. E. Haynes*

OLD FAITHFUL LODGE, MAIN BUILDING

# LIVING *in the* YELLOWSTONE

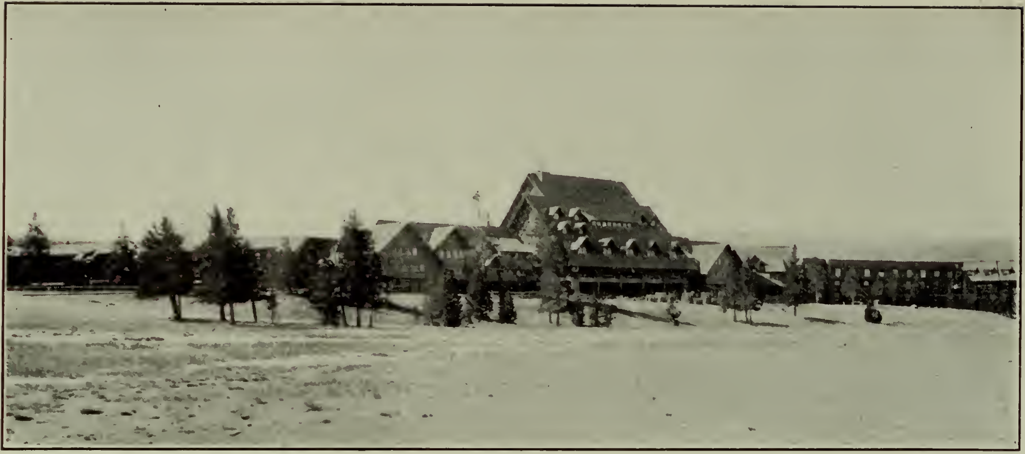
THE park has entrances on all four sides. All have railroad connections; the southern entrance, by way of Jackson Hole and past the jagged snowy Tetons, has three approach roads. The roads from all entrances enter a central belt road which makes a large circuit connecting places of special interest.

Four large hotels are located at points convenient for seeing the sights and are supplemented by lodges at modest prices.

But the day of the unhurried visitor has dawned. If you want to enjoy your Yellowstone—if, indeed, you want even to *see* it—you should make your minimum twice five days; two weeks is better; a month is ideal.

Spend the additional time at the canyon and on the trails. See the lake and the pelicans. Fish in Shoshone Lake. Climb Mount Washburn. Spend a day at Tower Falls. See Mammoth Hot Springs. Hunt wild animals with a camera. Stay with the wilderness and it will repay you a thousandfold. Fish a little, study nature in her myriad wealth—and live.

The Yellowstone National Park is ideal for camping out. When people realize this it should quickly become one of the most lived in, as it already is one of the most livable, of all our national parks.



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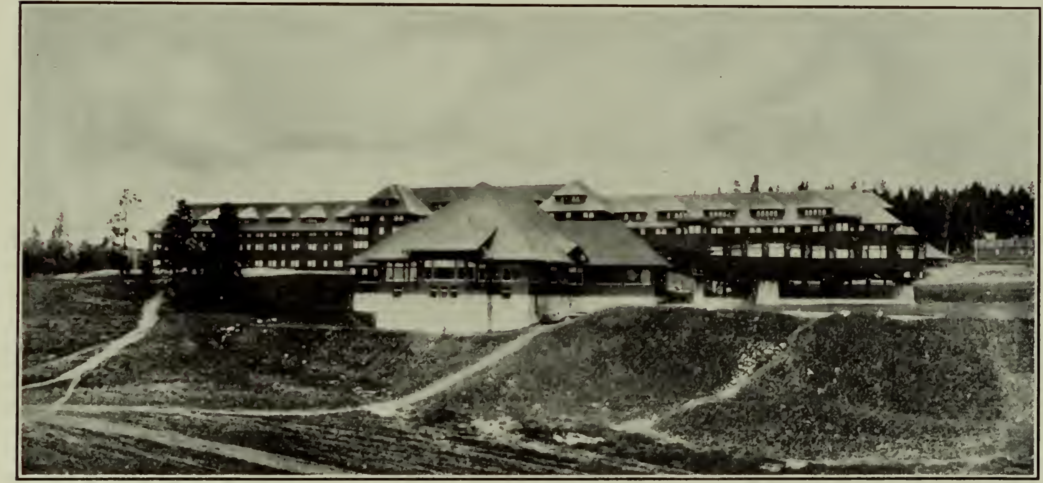

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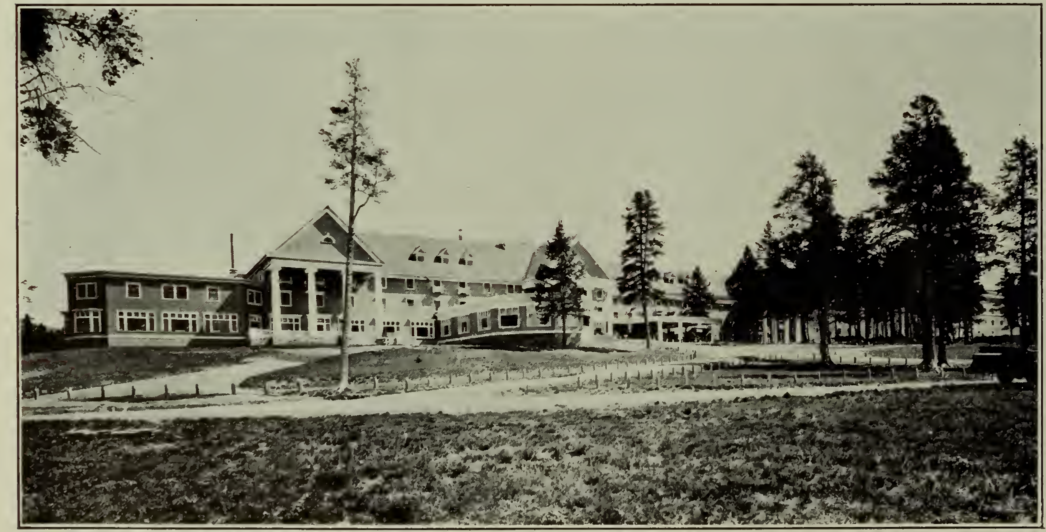
CANYON HOTEL

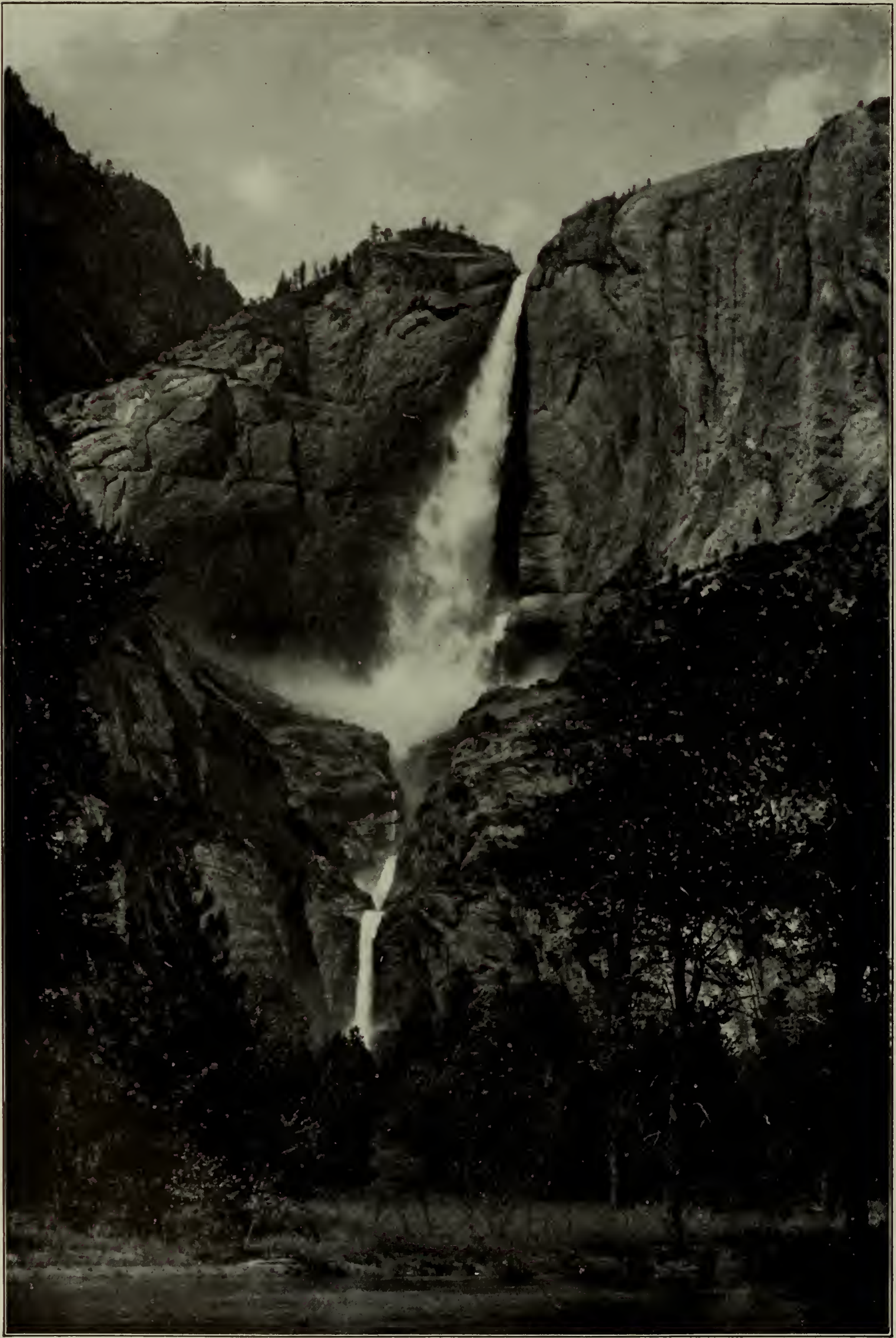


*Photograph by J. E. Haynes, St. Paul*

LAKE HOTEL

THREE OF THE FOUR LARGE HOTELS IN THE YELLOWSTONE NATIONAL PARK

# YOSEMITE



*Photograph by A. C. Pillsbury*

THE HIGHEST WATERFALL IN THE WORLD—THE YOSEMITE FALLS

The Upper Fall measures 1,430 feet, as high as nine Niagaras. The Lower Fall measures 320 feet
The total drop from crest to river, including intermediate cascades, is almost half a mile

*Photograph by J. V. Lloyd*

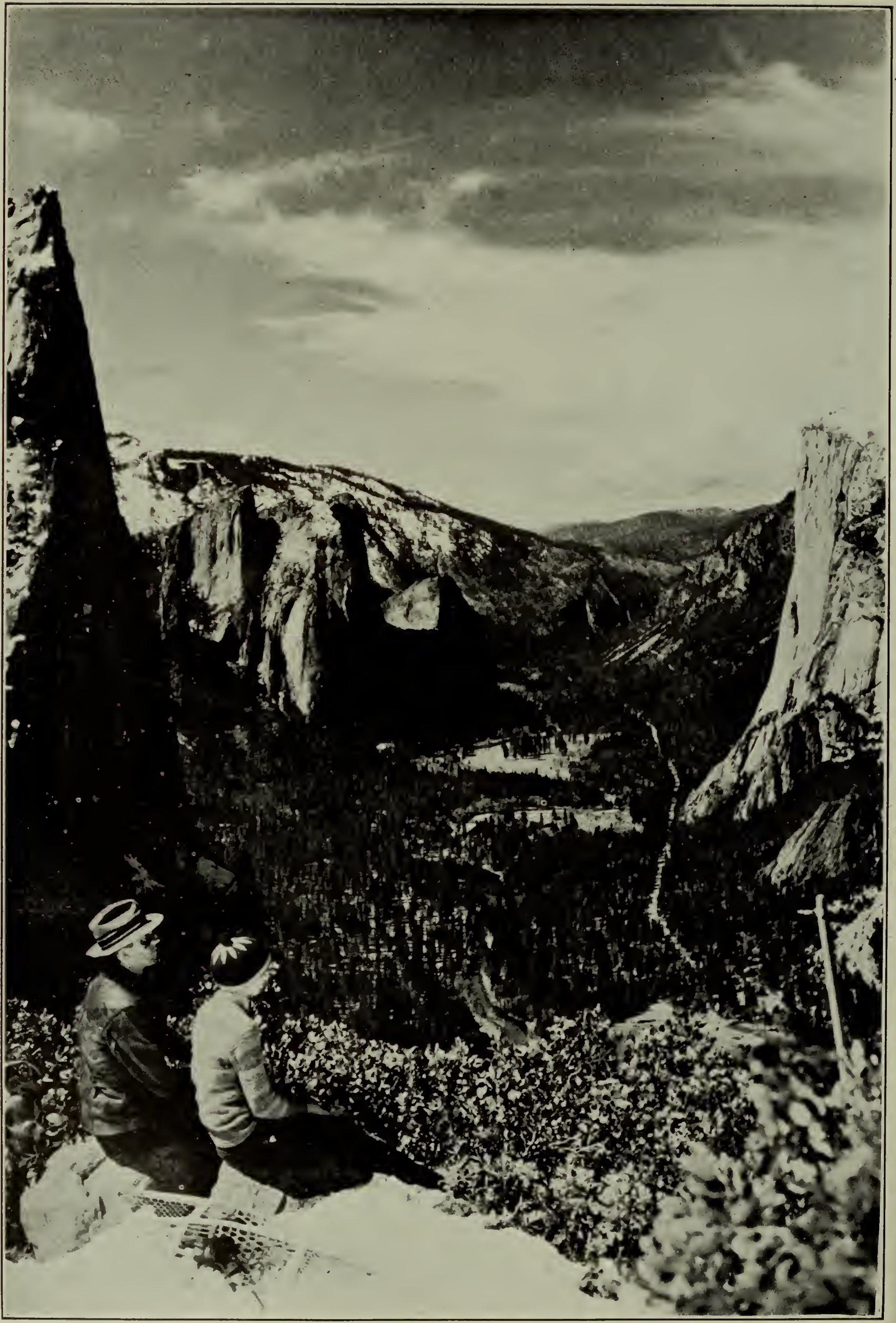
The Gates of the Valley

# LAND OF ENCHANTMENT

WHO does not know of the Yosemite Valley? And yet, how few have heard of the Yosemite National Park! How few know that this world-famous, incomparable valley is merely a crack seven miles long in a scenic masterpiece of eleven hundred square miles!

John Muir loved the valley and crystallized its fame in phrase.

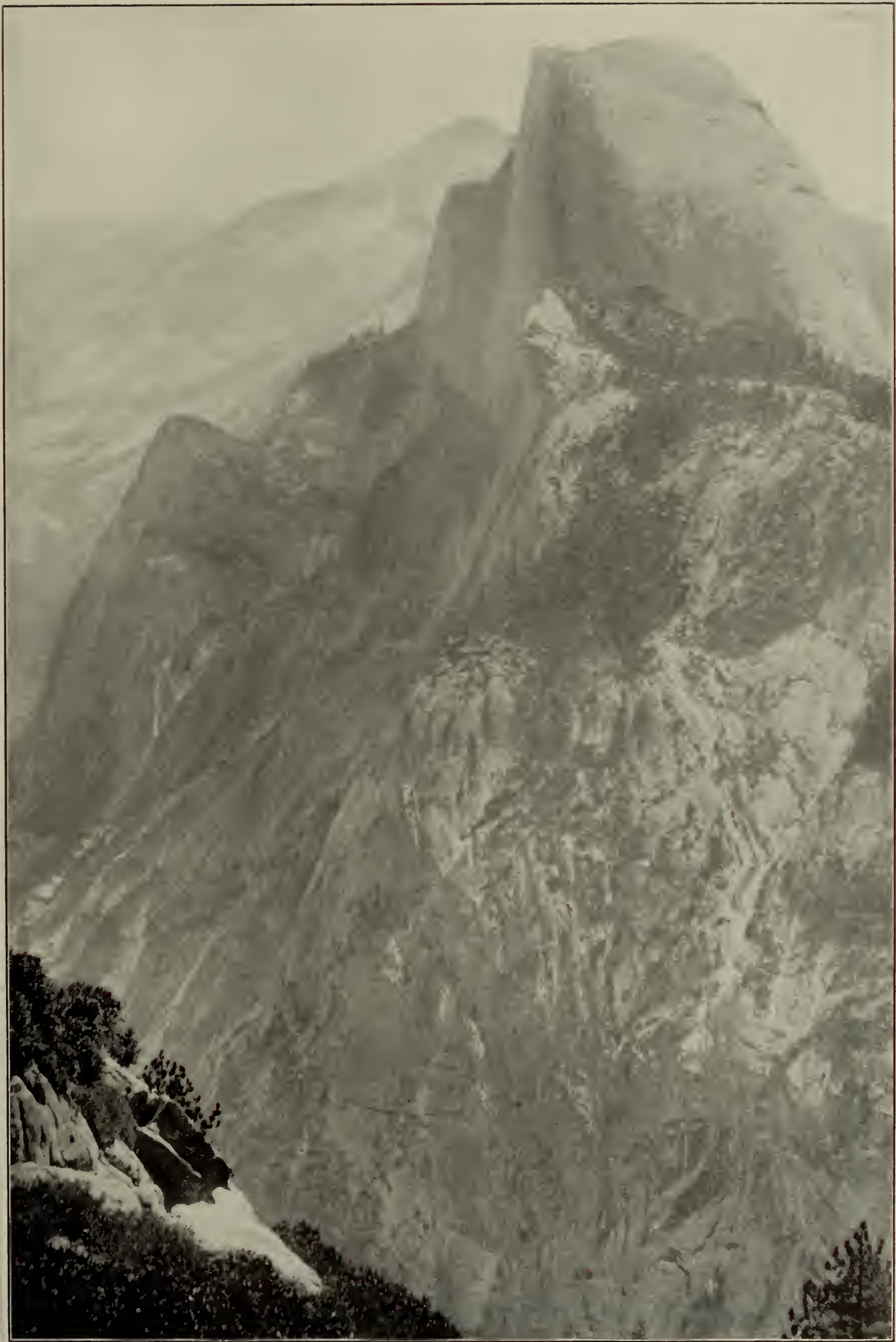
But still more he loved the national park, which he describes as including "innumerable lakes and waterfalls and smooth silky lawns; the noblest forests, the loftiest granite domes, the deepest ice-sculptured canyons, the brightest crystalline pavements, and snowy mountains soaring into the sky twelve and thirteen thousand feet, arrayed in open ranks and spiry pinnacled groups partially separated by tremendous canyons and amphitheaters; gardens on their sunny brows, avalanches thundering down their long white slopes, cataracts roaring gray and foaming in the crooked rugged gorges, and glaciers in their shadowy recesses working in silence, slowly completing heir sculptures; newborn lakes at their feet, blue and green, free or encumbered with drifting icebergs like miniature Arctic Oceans, shining, sparkling, calm as stars."



*Photograph by J. V. Lloyd*

View from Union Point

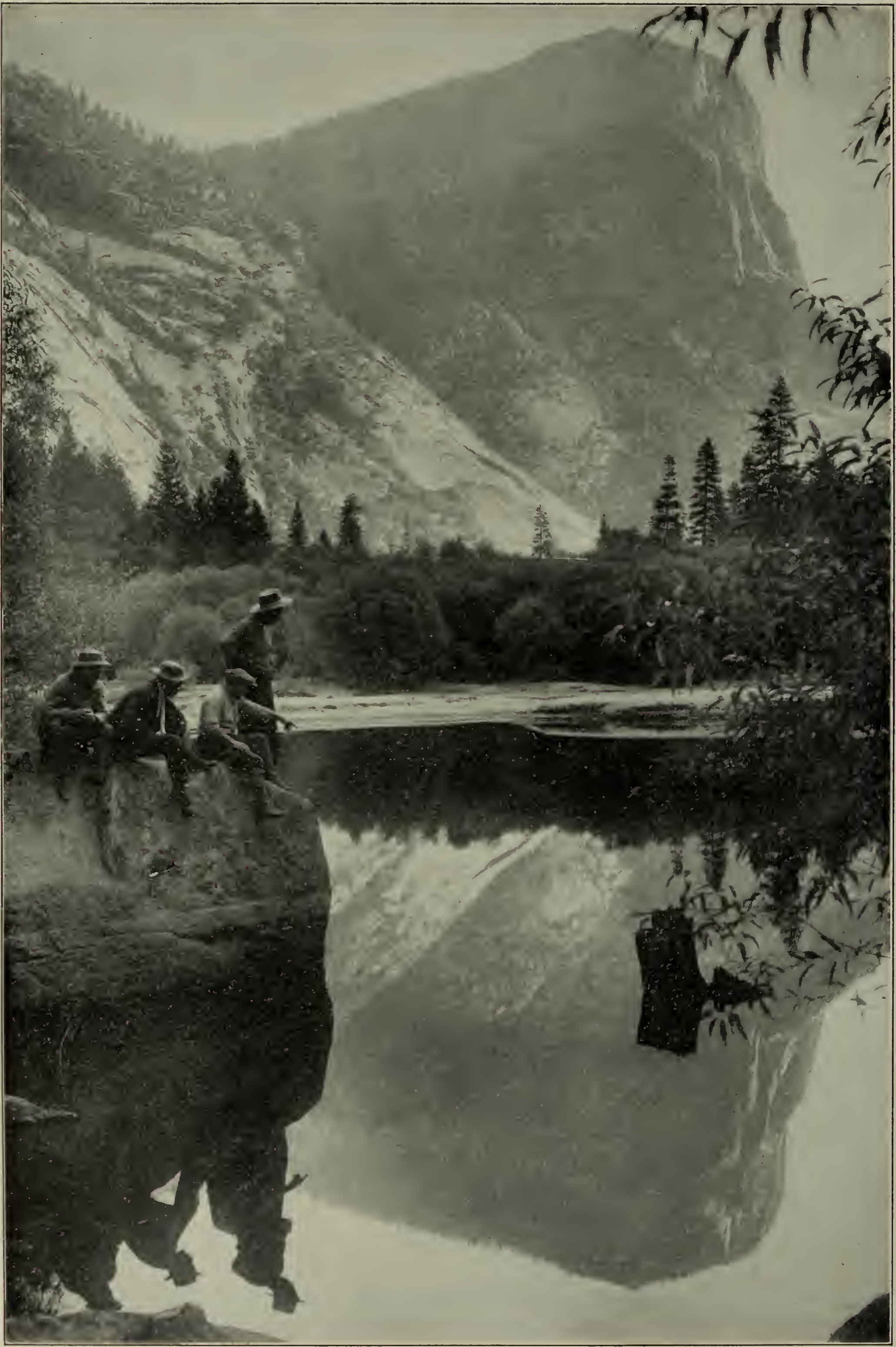
On the Four-Mile Trail to the rim of Yosemite Valley



*Photograph by J. T. Boysen*

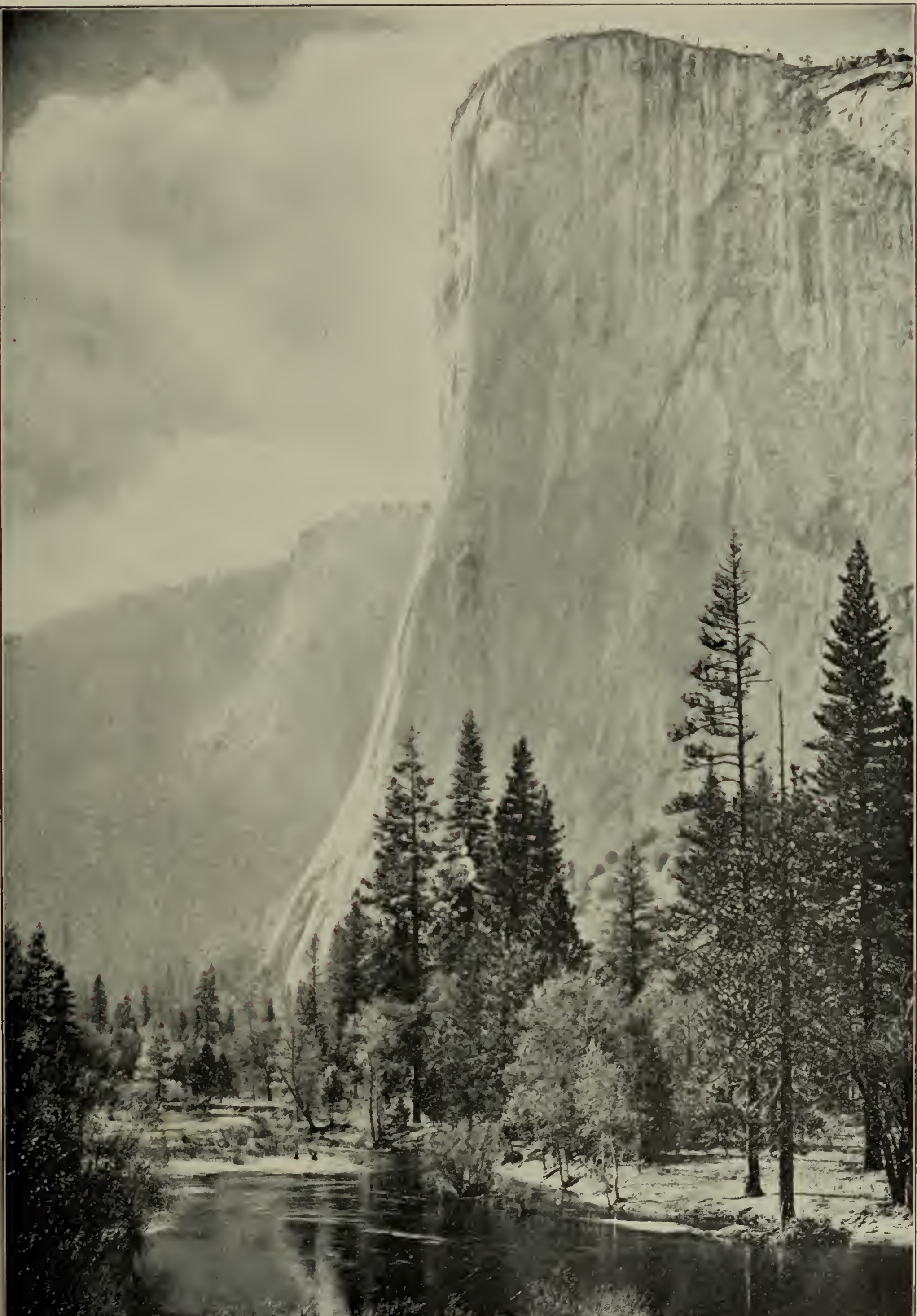
Half Dome, from Near Washington Column

Its summit is 4,892 feet above the floor of the valley



Early Morning Beside Mirror Lake

This lake is famous for its reflections of the cliffs. Mount Watkins in the background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*Copyrighted by J. T. Boysen*

EL CAPITAN AT SUNSET

This gigantic rock, whose hard granite resisted the glacier, rises 3,604 feet from the valley floor

# *The* VALLEY INCOMPARABLE

*Photograph by U. S. Reclamation Service*

Beautiful Vernal Falls

THE first view of most spots of unusual celebrity often falls short of expectation, but this is seldom, if ever, true of the Yosemite Valley. The sheer immensity of the precipices on either side of the peaceful floor; the loftiness and the romatic suggestion of the numerous waterfalls; the majesty of the granite walls; and the unreal, almost fairy quality of the ever-varying whole can not be successfully foretold.

This valley was once a tortuous river canyon. So rapidly was it cut by the Merced that the tributary valleys soon remained hanging high on either side. Then the canyon became the bed of a great glacier. It was widened as well as deepened, and the hanging character of the side valleys was accentuated.

This explains the enormous height of the waterfalls.

The Yosemite Falls, for instance, drops 1,430 feet in one sheer fall, a height equal to nine Niagara Falls piled one on top of the other. The Lower Yosemite Fall, immediately below, has a drop of 320 feet, or two Niagaras more. Vernal Falls has the same height. The Nevada Falls drops 594 feet sheer, and the celebrated Bridalveil Falls 620 feet. Nowhere else in the world may be had a water spectacle such as this.

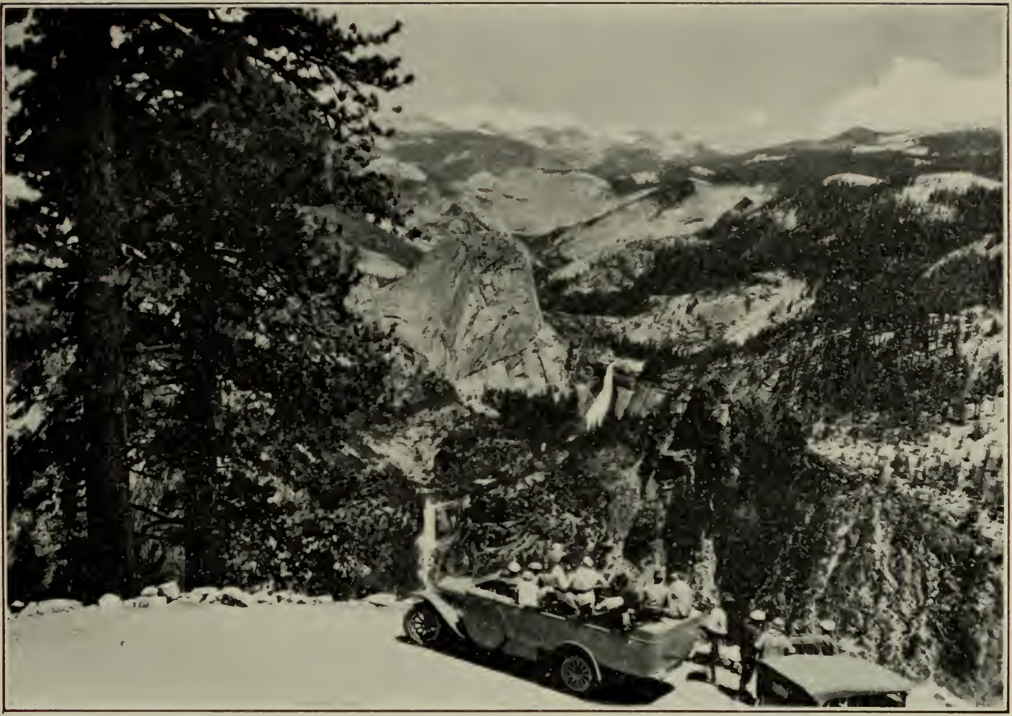
*Photograph by H. C. Tibbitts*

Its Name is Self-Evident—The Bridalveil Falls

*Photograph by J. V. Lloyd*

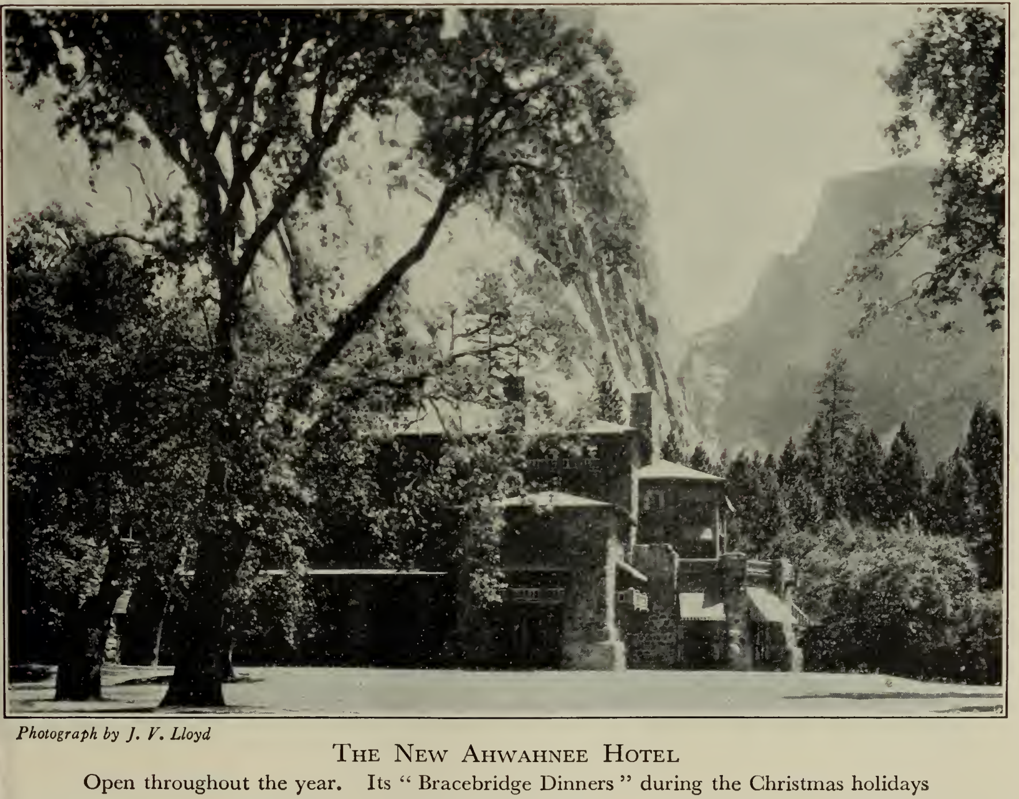
Tenaya Lake, Elevation 8,146 Feet, is Typical of Yosemite's Many Beautiful Mountain Lakes

A Striking View of Nevada Falls, Liberty Cap on Left



*Photograph by J. V. Lloyd*

VERNAL AND NEVADA FALLS AND LIBERTY CAP FROM WASHBURN TURN ON THE GLACIER POINT TRAIL



*Photograph by J. V. Lloyd*

THE NEW AHWAHNEE HOTEL

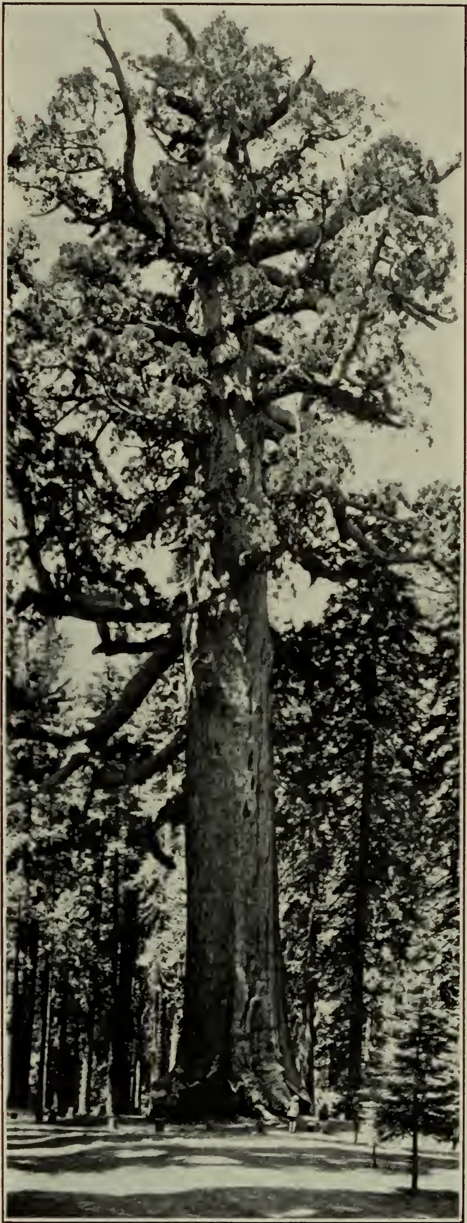
Open throughout the year. Its " Bracebridge Dinners " during the Christmas holidays are becoming famous

*Photograph by A. C. Pillsbury*

THE SHEER IMMENSITY OF THE PRECIPICES ON EITHER SIDE THE VALLEY'S PEACEFUL
FAIRYLIKE QUALITY OF THE EVER-VARYING

F oor, the Romantic Majesty of the Granite Walls, and the Unreal, Almost
V hole, Attest It Incomparable

# CHARM OF THE SCENIC WILD



The Grizzly Giant, the Biggest Sequoia Tree in Yosemite National Park, Believed to be Nearly Four Thousand Years Old

SUMMER in the Yosemite is unreal. The valley, with its foaming falls dissolving into mists, its calm forests hiding the singing river, its enormous granites peaked and domed against the sky, its sound of distant waters, is a thing of beauty. One has a sense of fairyland and the awe of infinity.

Imagine Cathedral Rocks rising twenty-six hundred feet above the wild flowers, El Capitan thirty-six hundred feet, Sentinel Dome four thousand feet, Half Dome five thousand feet, and Clouds Rest six thousand feet! And among them, the waterfalls!

Even the weather appears impossible; the summers are warm, but not too warm; dry, but not too dry; the nights cold and marvelously starry.

A few miles away are the Big Trees, not the greatest groves nor the greatest trees, for those are in the Sequoia National Park, a hundred miles south, but three groves containing monsters which, next to Sequoia's, are the hugest and the oldest living things. Of these the Grizzly Giant—whose diameter is nearly thirty feet, whose girth is over ninety-nine, and whose height is more than two hundred—is king.

Their presence commands the silence due to worship.

Winter has become a feature in the life of the valley. Hotels are open to accommodate an increasing flow of visitors. The falls are still and frozen, the trees laden with snowy burdens. The greens have vanished; the winter sun shines upon a glory of gray and white. Winter sports are now very popular on the floor of the valley.

*Photograph by J. V. Lloyd*

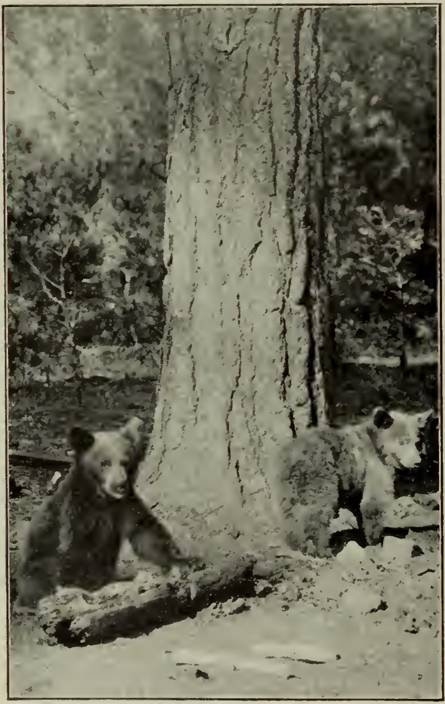
EXCELLENT SKIING IS ENJOYED IN THE HIGH MOUNTAIN COUNTRY ABOVE YOSEMITE VALLEY

*Photograph by J. V. Lloyd*

DURING THE WINTER-SPORTS SEASON GAILY-COLORED "DRIVE-YOURSELF" SLEIGHS ARE POPULAR

# LIVING IN THE WILDERNESS

*Copyrighted by J. T. Boysen*
WHO'S COMING?



*Copyrighted by J. T. Boysen*
WOOF!

LIVING is comfortable in the Yosemite. A luxurious new hotel, the Ahwahnee, was completed in 1927 to care for both summer and winter visitors, and lodges offer excellent summer accommodations at more reasonable rates. Above the valley are lodges and camps at convenient intervals on road and trail. There is also a hotel on Glacier Point, overlooking the valley.

The Yosemite is an excellent place to camp out. One may have choice of many kinds of mountain country. Nearly everywhere the trout fishing is exceptionally fine. Camping outfits may be rented and supplies purchased in the valley. Garages for motorists and resthouses for hikers are located at convenient intervals. A number of free public automobile camp grounds have been made available by the Government.

A new all-year road into Yosemite Valley was opened to the public during the summer of 1927.

# TIOGA ROAD

ABOVE the north rim of the valley the old Tioga Road, which the Department of the Interior acquired in 1915 and put into good condition, crosses the park from east to west, affording a new route across the Sierra and opening to the public for the first time the magnificent scenic region in the north.

The Tioga Road was built in 1881 to a mine soon after abandoned. For years it had been impassable. It is now the gateway to a wilderness heretofore accessible only to campers.

# NORTH OF THE VALLEY'S RIM

BEFORE the restored Tioga Road made accessible the magnificent mountain and valley area constituting the northern half of the Yosemite National Park, this pleasure paradise was known to none except a few enthusiasts who penetrated its wilderness year after year with camping outfits. Motorists making the trip from the valley to Lake Tahoe now pass through this area.

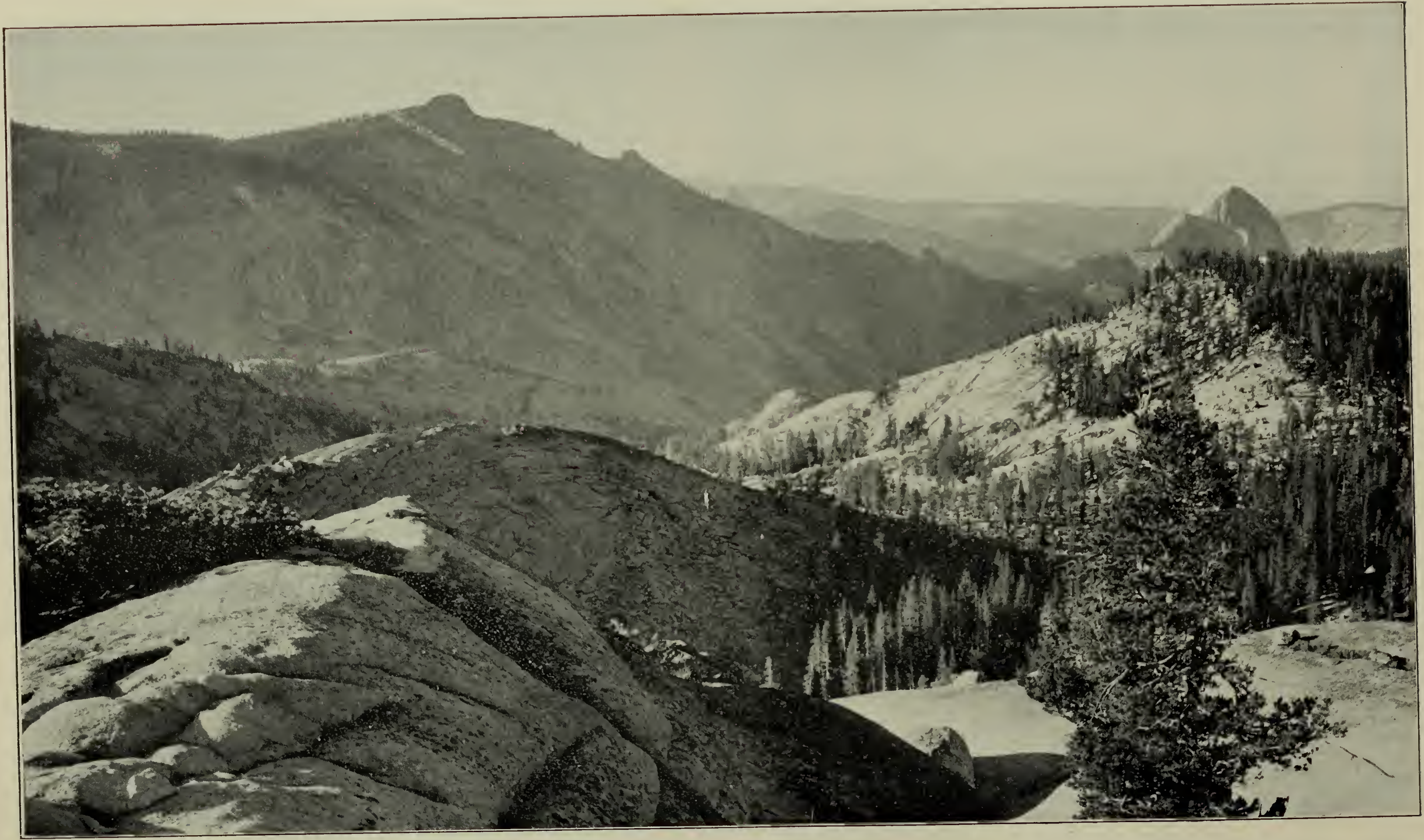
It is the region of rivers and lakes and granite domes and brilliantly polished glacial pavements. The mark of the glacier may be plainly traced on every hand.

It is the region of small glaciers, remnants of a gigantic past, of which there are several in the park. It is the region of rock-bordered glacier lakes of which there are more than two hundred and fifty. It is the region, above all, of small, rushing rivers and of the roaring, foaming, twisting Tuolumne, second only to the Merced.

From the base of the Sierra crest, born of its snows, the Tuolumne River rushes westward roughly paralleling the Tioga Road. Midway it slants sharply down into the Tuolumne Canyon, forming in its mad course a water spectacle destined some day to world fame.

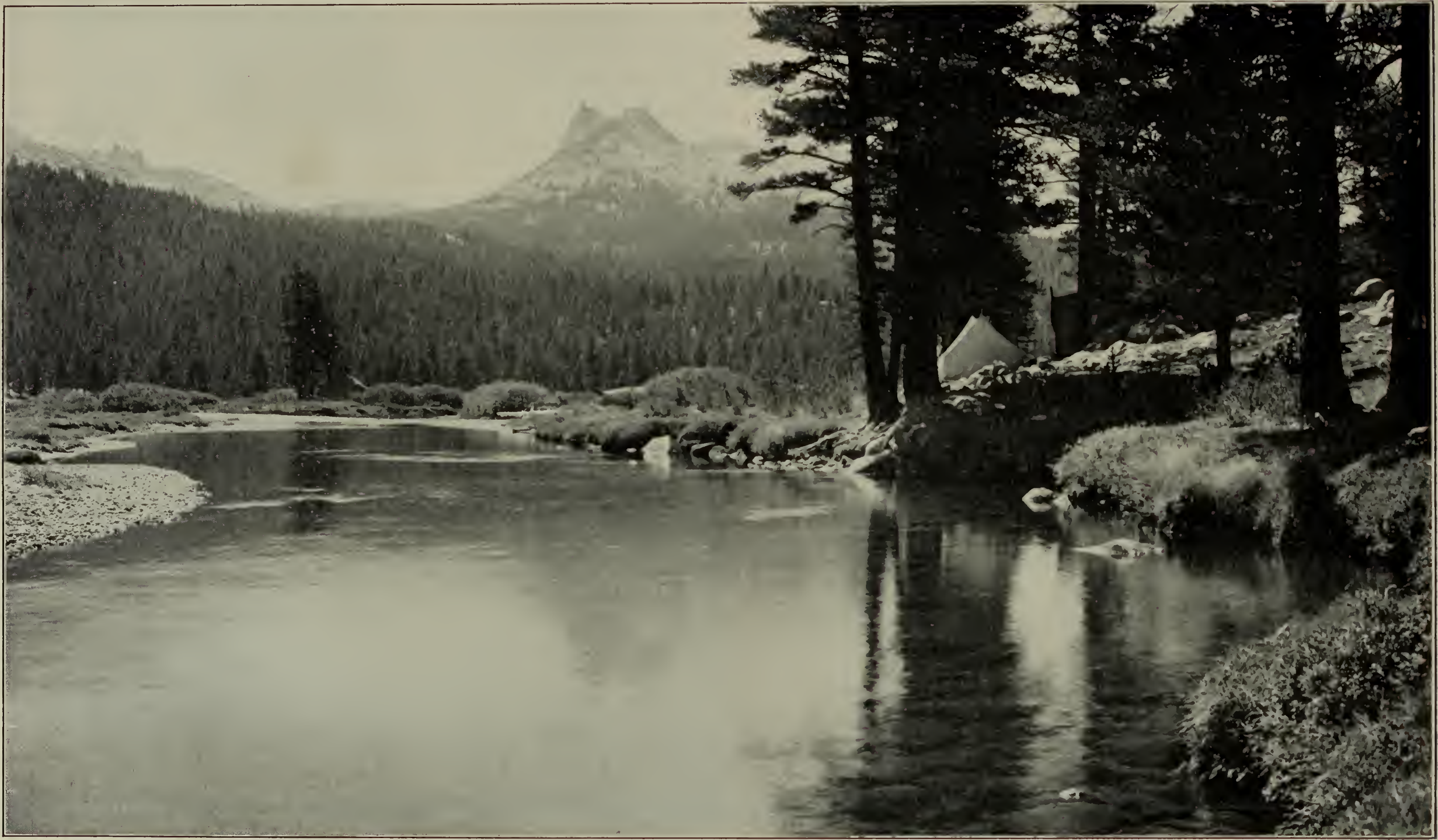
*Photograph by George Stone*

Tioga Road Scenery



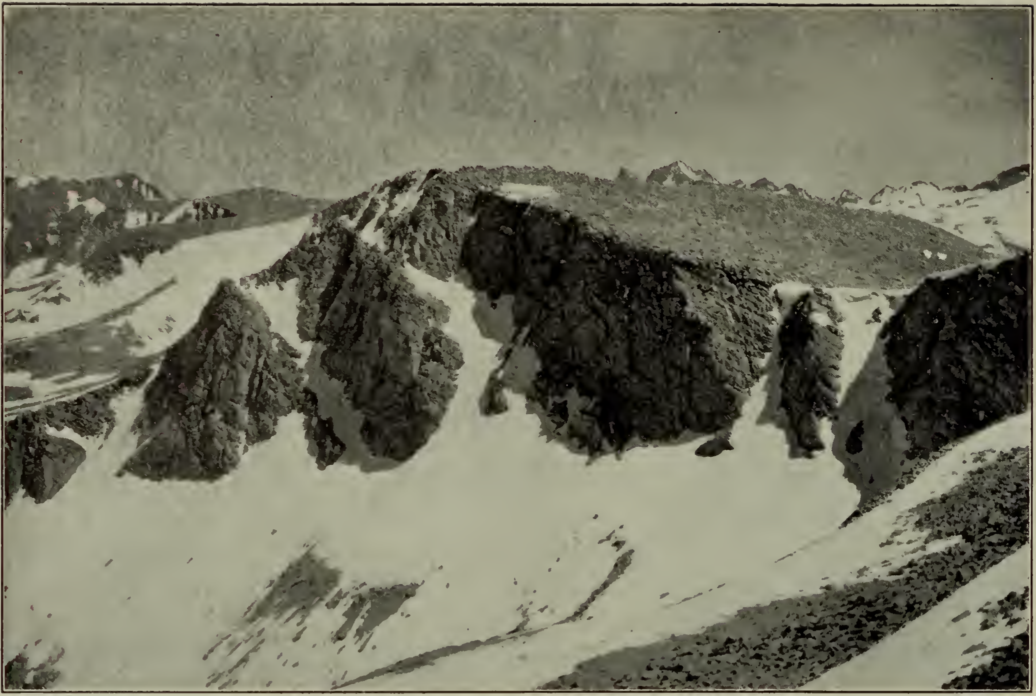
*Photograph by H. C. Tibbitts*

Looking Down Tenaya Canyon, With the Great Bulk of Cloud's Rest on the Left



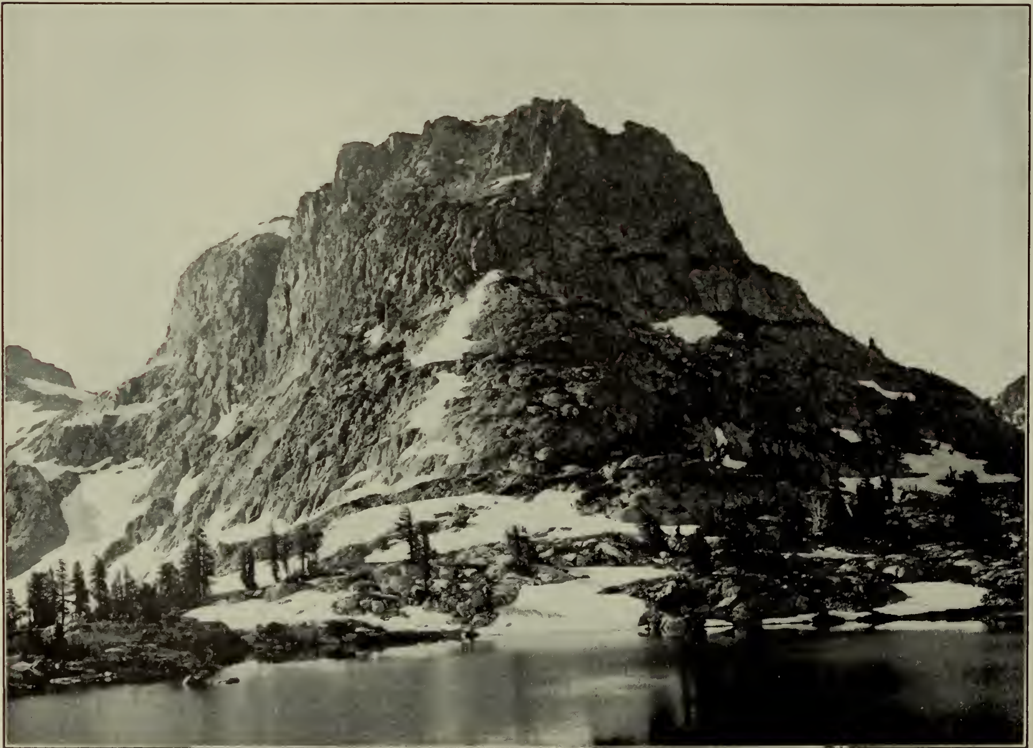
*Photograph by H. C. Tibbitts*

The Celebrated Tuolumne Meadows, from the Tioga Road Near Soda Springs, Showing Cathedral Peak



*Photograph by W. L. Huber*

THE HIGH SIERRA: VIEW OF MOUNT RITTER FROM KUNA CREST



*Photograph by Herbert W. Gleason*

BEAUTIFUL ROGERS LAKE AND REGULATION PEAK IN THE NORTHERN PART OF THE PARK

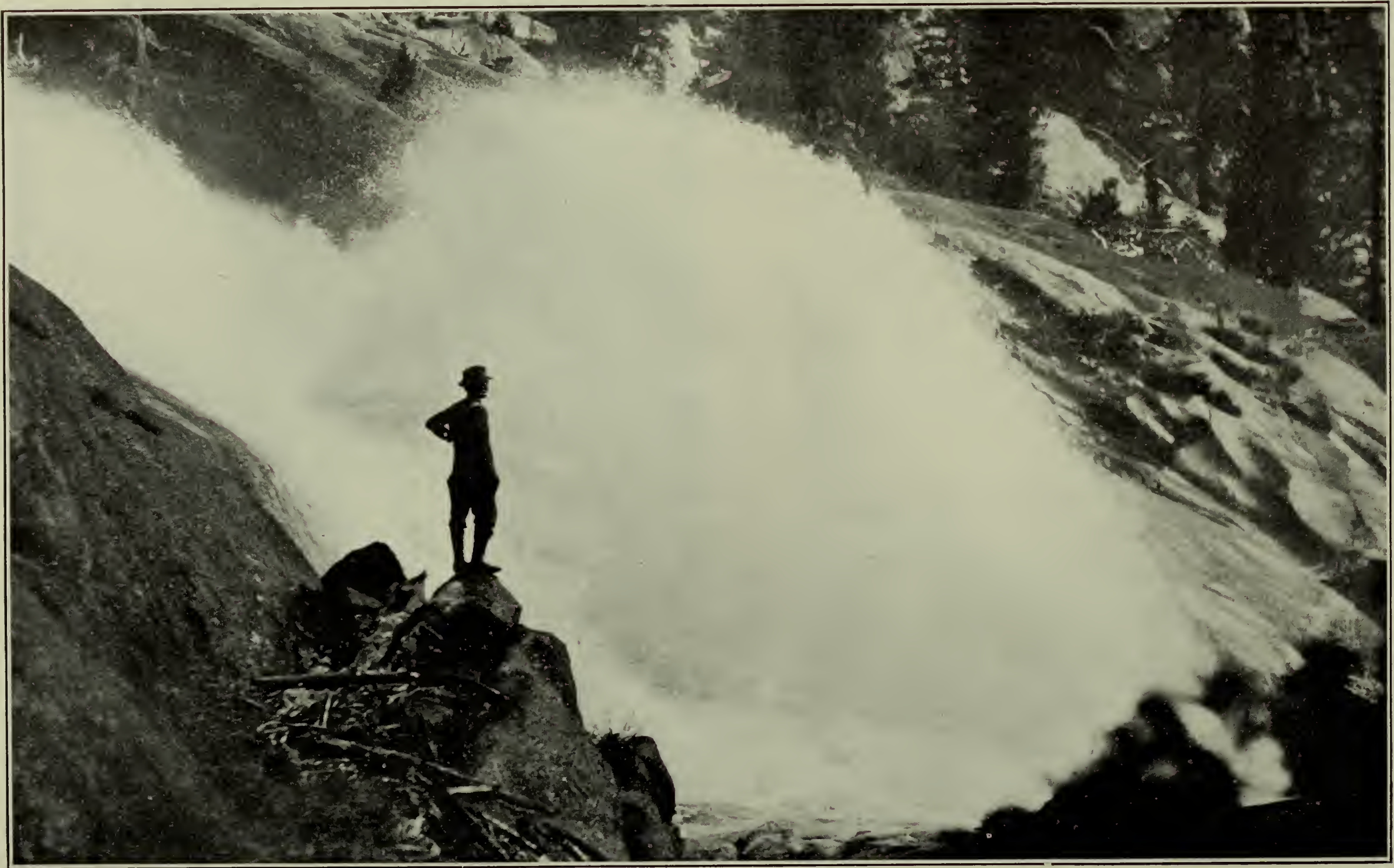
*Photograph by J. V. Lloyd*

FISHING IN THE MERCED RIVER

*Photograph by C. O. Schneider*

A BEDCHAMBER IN YOSEMITE

Travelers on the trails carry no tents because it does not rain. A sleeping bag, a pine-needle mattress, a sheltered grove, and a ceiling of green leaves amply suffice



Photograph by *A. C. Pillsbury*

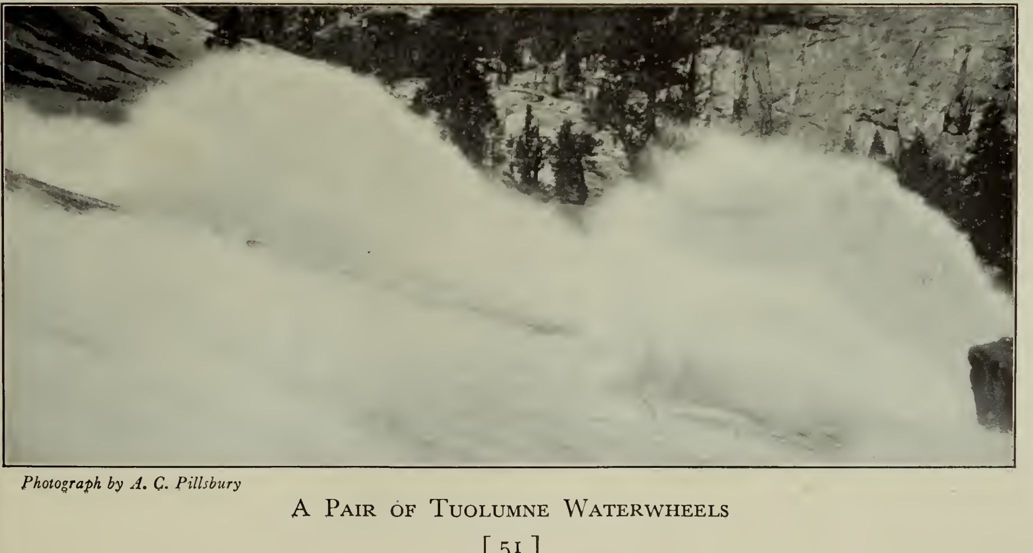
A Close View of the Big Waterwheel, Tuolumne Canyon

Photograph by W. L. Huber

THE WATERWHEEL BELOW CALIFORNIA FALLS

# MAD WATERS OF TUOLUMNE

AN EXCELLENT trail leads from the Tioga Road down the Grand Canyon of the Tuolumne, famous for its leaping waters. Here the river, slanting sharply, becomes, in John Muir's phrase, " one wild, exulting, onrushing mass of snowy purple bloom spreading over glacial waves of granite without any definite channel, gliding in magnificent silver plumes, dashing and foaming through huge bowlder dams, leaping high in the air in wheellike whirls, displaying glorious enthusiasm, tossing from side to side, doubling, glinting, singing in exuberance of mountain energy."



Photograph by A. C. Pillsbury

A PAIR OF TUOLUMNE WATERWHEELS

# THE EVERLASTING SNOWS

SUMMITS of perpetual snow are, for most Americans, a new association with Yosemite. But the region's very origin was that Sierra whose crest peaks on the park's eastern boundary still shelter in shrunken old age the once all-powerful glaciers.

Excelsior, Conness, Dana, Kuna, Blacktop, Lyell, Long—from the companionship of these great peaks descended the ice pack of old and descend to-day the sparkling waters of the Tuolumne and the Merced.

From their great summits the climber beholds a sublime wilderness of crowded, towering mountains, a contrast to the silent, uplifting valley as striking as mind can conceive. Everlasting snows fill the hollows between the peaks and spatter their jagged granite sides. The glaciers feed innumerable small lakes.

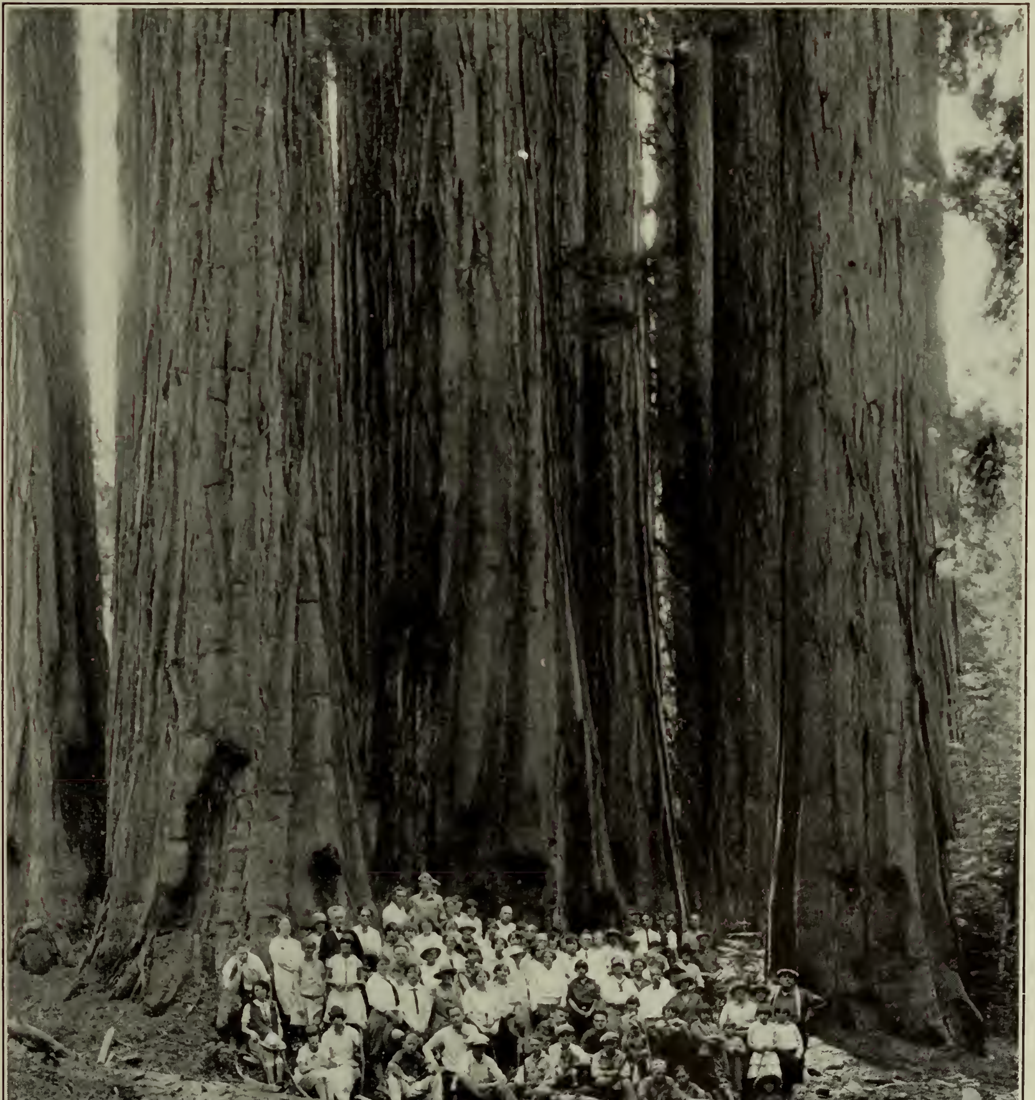
*Photograph by W. L. Huber*

ASCENDING MOUNT LYELL

*Photograph by J. V. Lloyd*

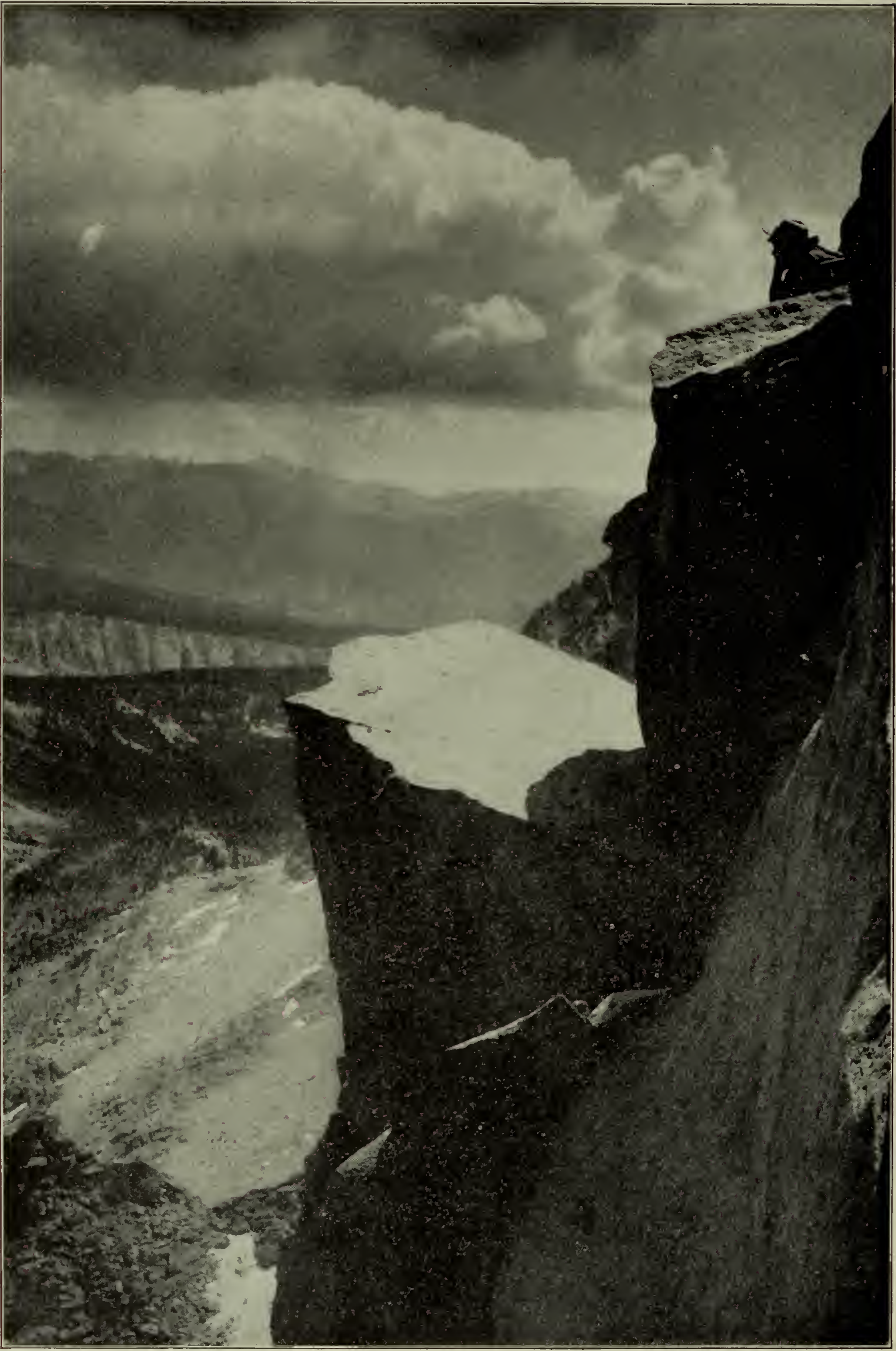
HALF DOME IN WINTER

# SEQUOIA AND GENERAL GRANT NATIONAL PARKS



*Photograph by Lindley Eddy*

Nature Guide Party at Congress Group of Big Trees in Giant Forest



*Photograph by Rodney L. Glisan*

View of the Big Arroyo from Sawtooth Peak

*Photograph by U. S. Geological Survey*

It is the Ideal Park for Camping

# LAND OF GIANT TREES

NATURE'S forest masterpiece is John Muir's designation of the giant tree after which is named the Sequoia National Park in middle eastern California. Here are found several large groves of the celebrated *Sequoia gigantea*, popularly known and widely celebrated as the Big Tree of California.

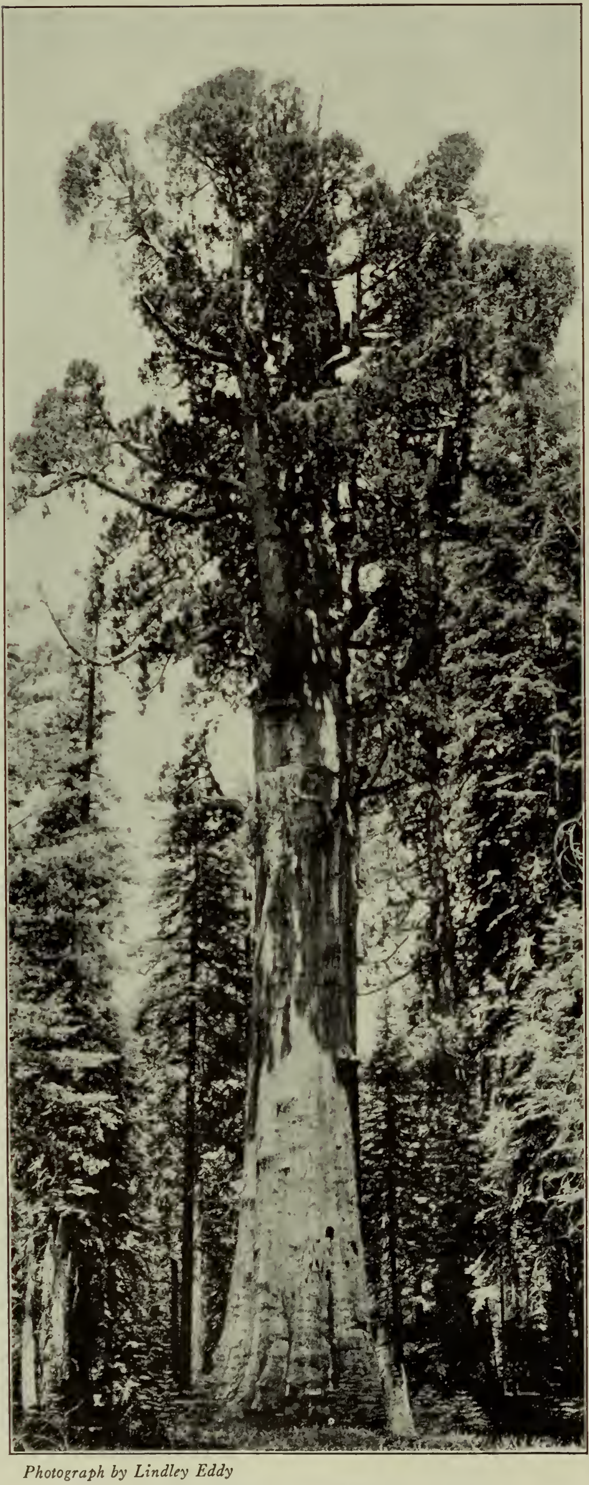
More than a million of these trees grow within the park's narrow confines, many of them mere babes of a few hundred years, many sturdy youths of a thousand years, many in the young vigor of two or three thousand years, and a few in full maturity. The principal entrances are Visalia and Exeter, California.

Near by is the General Grant National Park, whose four square miles were set apart because they contain a magnificent grove of Big Trees, including the General Grant Tree, second only in size and age to the patriarch of all, the General Sherman.

On Sequoia's favored slopes grow other mammoth conifers. The sugar pine, yellow pine, and red and white firs attain a size which would distinguish them were they not in the company of the Big Trees.

Sequoia is also the park of birds, and many interesting species are found here. It is an ideal vacation land for the hiker, the camper, and the fisherman.

# THE BIGGEST THING ALIVE



*Photograph by Lindley Eddy*

THE GENERAL SHERMAN TREE

Probably the largest and oldest living thing in all the world

OF the thousands, perhaps millions, of sequoia trees, old and young, twelve thousand exceed ten feet in diameter. Muir states that a diameter of twenty feet and a height of two hundred and seventy-five is perhaps the average for mature and favorably situated trees, while trees twenty-five feet in diameter and approaching three hundred in height are not rare.

But the greatest trees have these astonishing dimensions:

General Sherman: Height, 273.9 feet; base diameter, 37.3 feet; diameter above bulge, 22.1 feet.

General Grant: Height, 266.6 feet; base diameter, 40.3 feet; diameter above bulge, 21.7 feet.

Abraham Lincoln: Diameter, 31 feet; height, 270 feet.

California: Diameter, 30 feet; height, 260 feet.

George Washington: Diameter, 29 feet; height, 255 feet.

A little effort will help you realize these dimensions. Measure and stake in front of a church the diameter of the General Sherman Tree. Then stand back a distance equal to the tree's height. Raise your eyes slowly and imagine this huge trunk rising in front of the church. When you reach a point in the sky forty-five degrees up from the spot on which you stand, you will have the tree's height were it growing in front of your church.

# THE OLDEST THING ALIVE

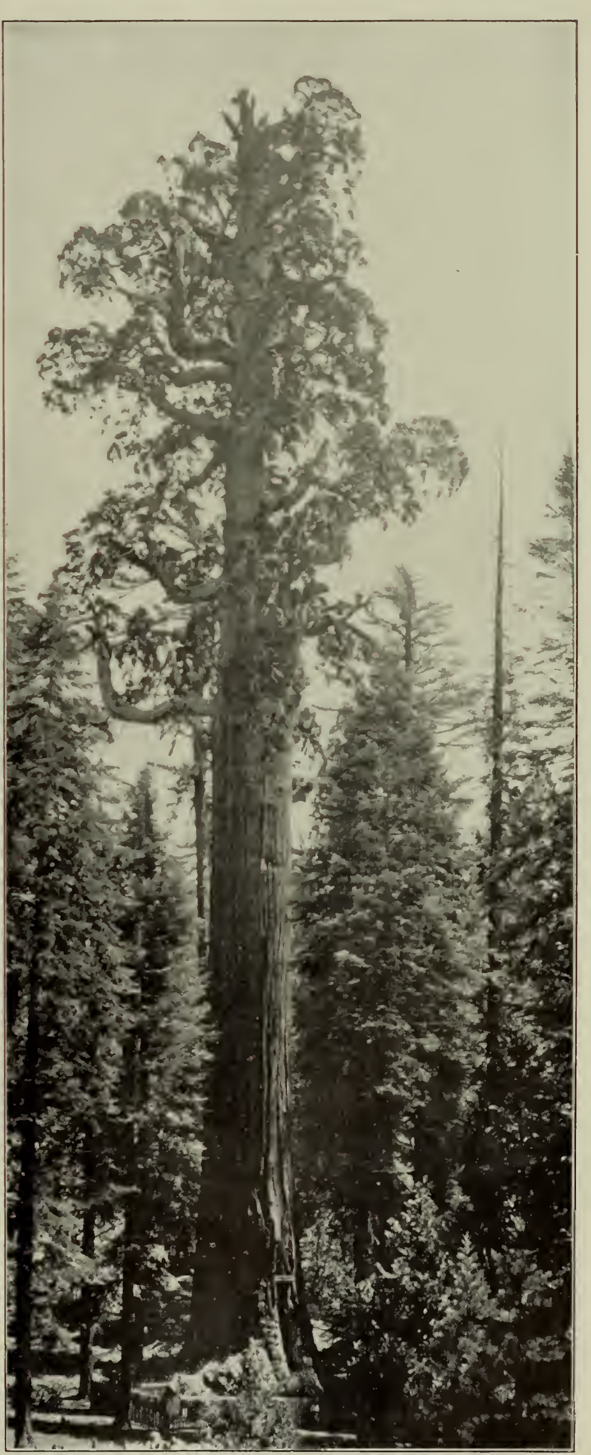
THE General Sherman Tree is perhaps the oldest living thing. At the birth of Moses it was probably a sapling. Its exact age can not be determined without counting the rings, but it is probably in excess of thirty-five hundred years and may be over five thousand years. When Christ was born it was a lusty youth of at least fifteen hundred summers.

There are many thousands of trees in the Sequoia National Park which were growing thriftily when Christ was born; hundreds which were flourishing while Babylon was in its prime; several which antedated the pyramids on the Egyptian desert.

John Muir counted four thousand rings on one prostrate giant. This tree probably sprouted while the Tower of Babel was still standing.

The sequoia is regular and symmetrical in general form. Its powerful, stately trunk is purplish to cinnamon brown and rises without a branch a hundred or a hundred and fifty feet—which is as high or higher than the tops of most forest trees. Its bulky limbs shoot boldly out on every side. Its foliage, the most feathery and delicate of all the conifers, is densely massed.

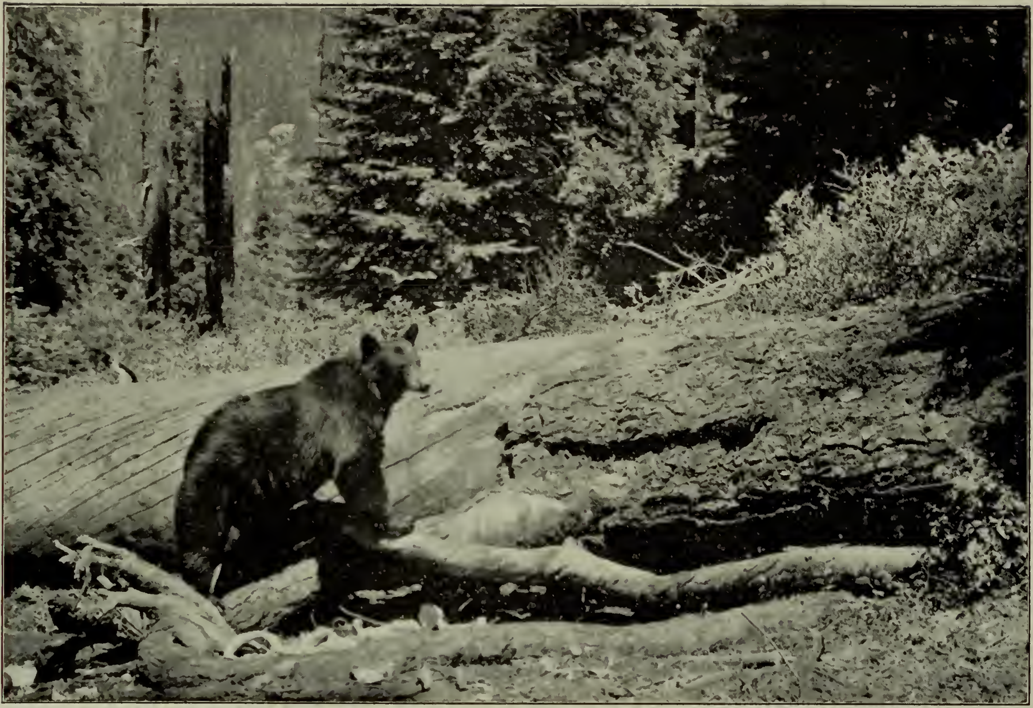
The wood is almost indestructible except by fire.



*Photograph by W. L. Huber*

THE GENERAL GRANT TREE

Second in size to the General Sherman Tree



*Photograph by George F. Belden*

"Deep in the Woody Wilderness"

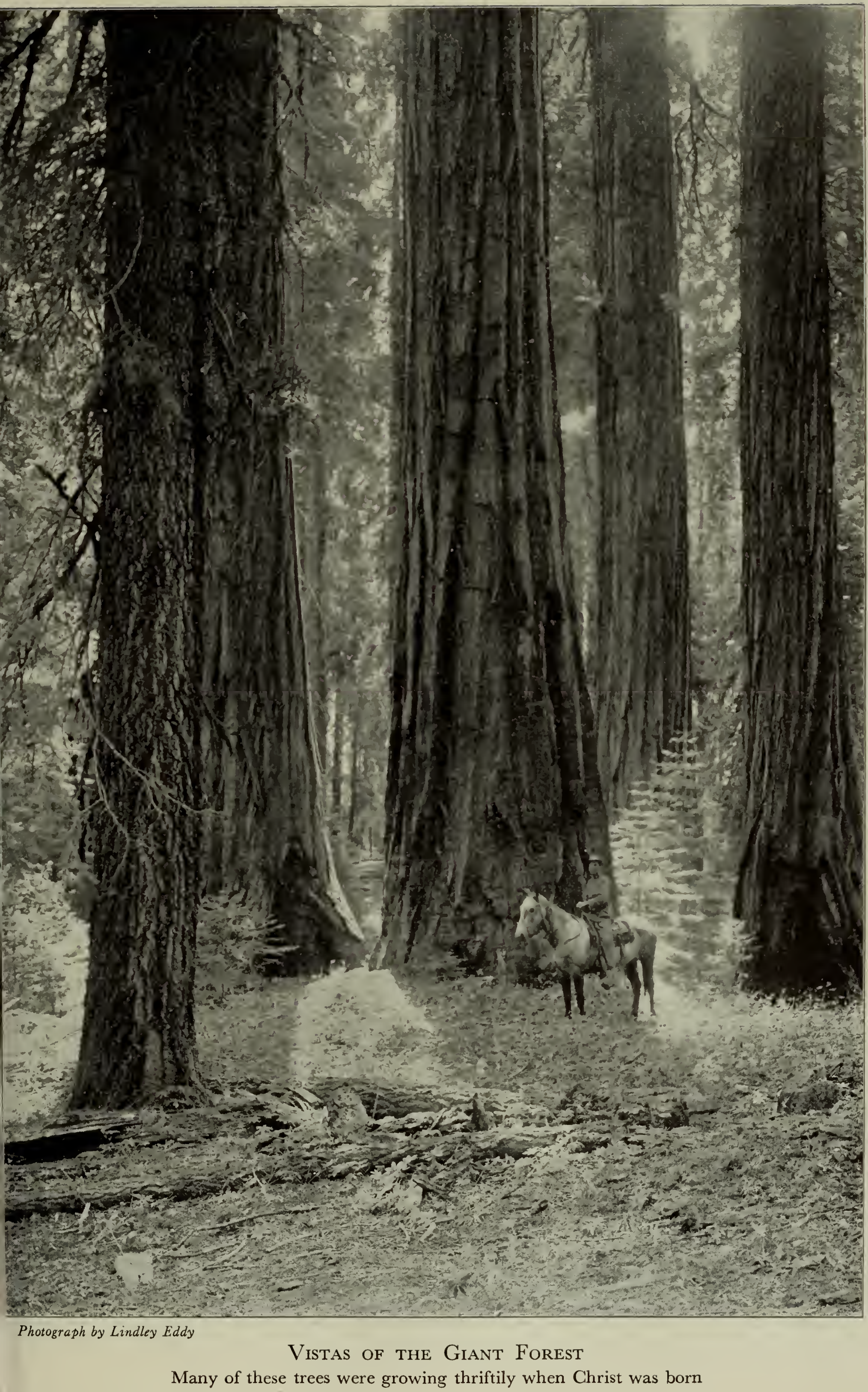
# WILDERNESS OF GIANTS

PERSONS who have been in the Mariposa Grove in the Yosemite National Park have seen Big Trees of the noblest type; but only in the Giant Forest of the Sequoia National Park will they see them in the impressive glory of massed multitude and wildest grandeur. To walk and wonder through these woods, even for a few hours, is to feel an emotion which can be duplicated nowhere else.

It is not the Big Trees alone, as in the Mariposa Grove, that stir the soul, but the bewildering and climatic repetition of giants rising singly or superbly grouped from a dense and seemingly endless forest of noble growths of many other kinds.

Without the sequoias this forest would be notable. With their constant unexpected repetition the effect is dramatic, even breath taking. Many of the largest trees are casually met as the visitor winds through the aisles of pine, and their sudden appearance is the more dramatic because of the freedom of their red pillared stems from the bright green flowing moss upon the trunks and branches of the surrounding pines.

Until July, 1916, when Congress appropriated $50,000 for the purchase of a part of the private holdings in the Giant Forest, it was our national misfortune and peril that most of these mammoth trees remained the property of individuals. The balance of the property was purchased for $20,000 by the National Geographic Society and donated to the United States.



*Photograph by Lindley Eddy*

VISTAS OF THE GIANT FOREST
Many of these trees were growing thriftily when Christ was born

*Photograph by Lindley Eddy*

ALTA PEAK FROM MORO ROCK

*Photograph by H. C. Tibbitts*

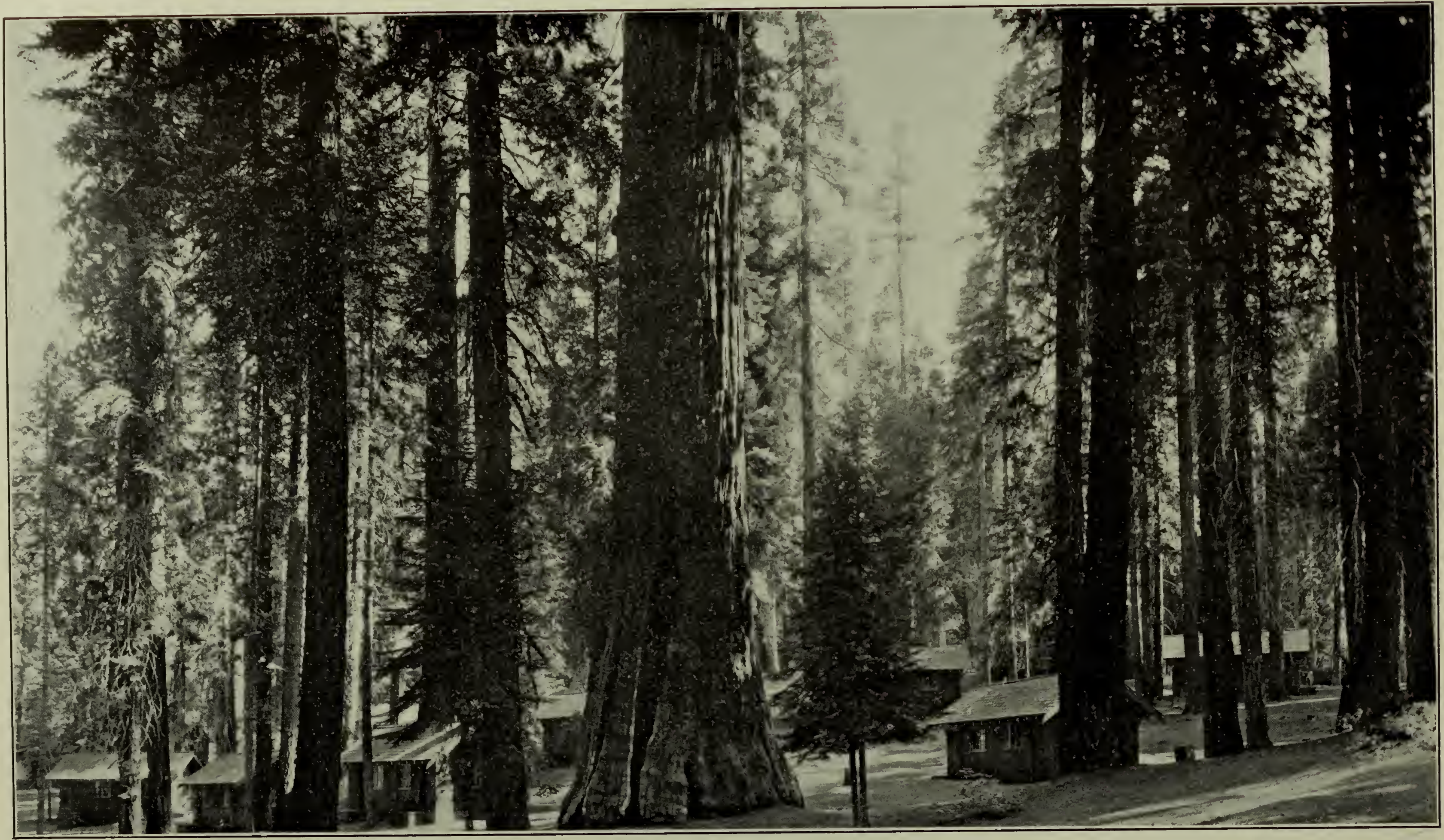
ALTA MEADOWS NEAR THE GIANT FOREST

*Photograph by Lindley Eddy*

SUNSET FROM THE RIM OF MARBLE FORK CANYON

*Photograph by Lindley Eddy*

JUDGE WALTER FRY FEEDING DEER IN GIANT FOREST

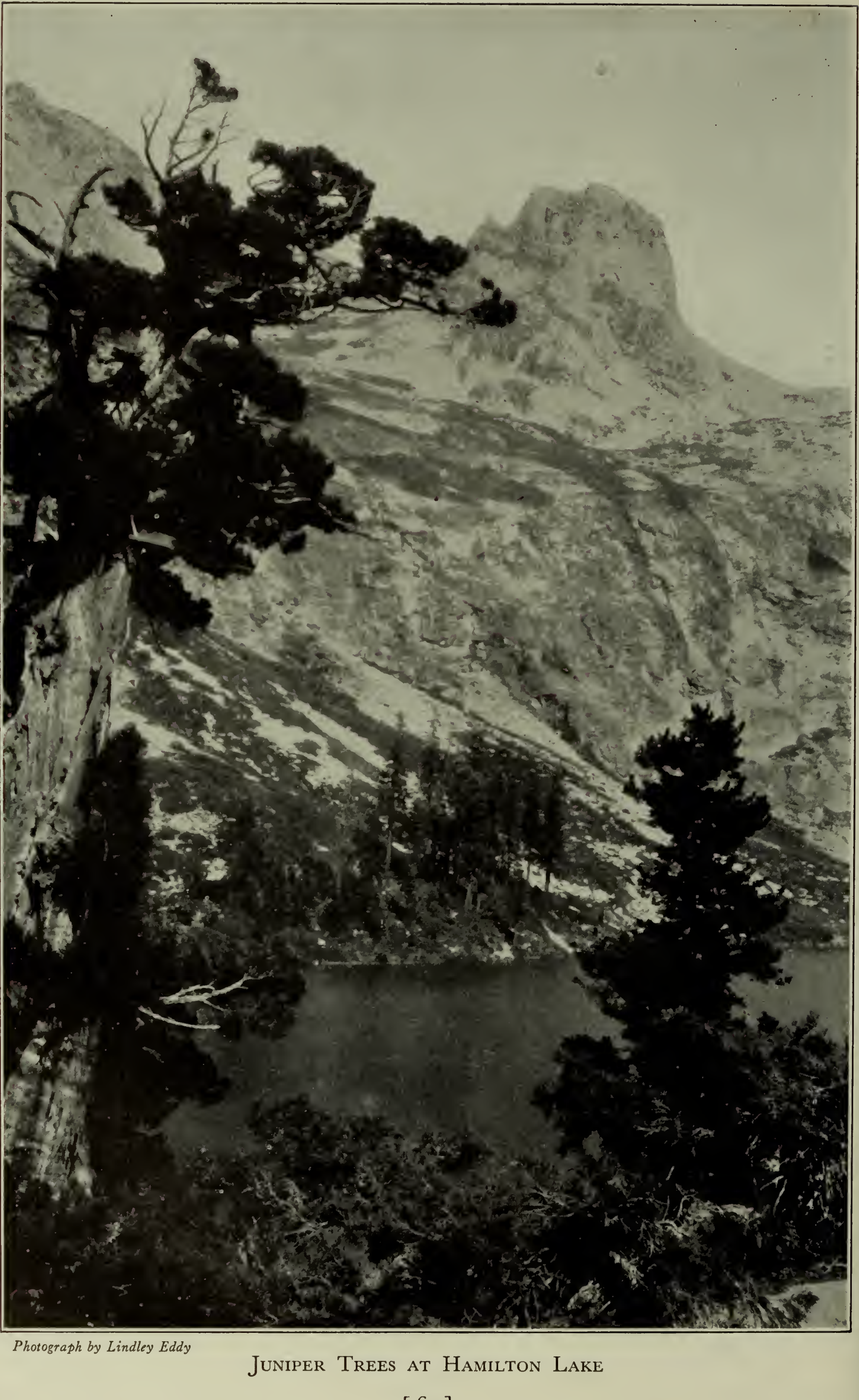


*Photograph by Lindley Eddy*

GIANT FOREST LODGE IN THE HEART OF THE BIG TREES
There is a similar lodge in General Grant Park

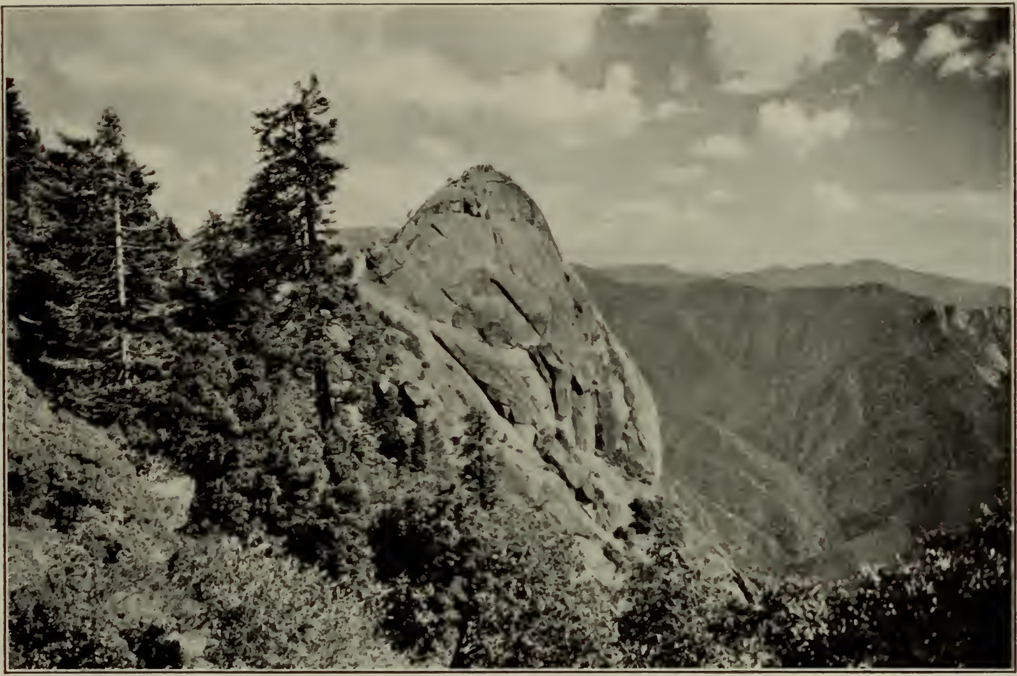
*Photograph by H. E. Roberts*

Sequoia and Fir in the General Grant National Park



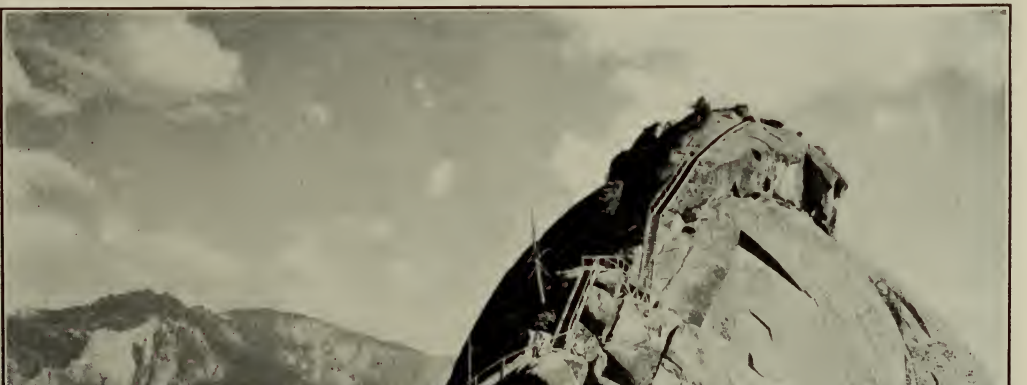
*Photograph by Lindley Eddy*

JUNIPER TREES AT HAMILTON LAKE



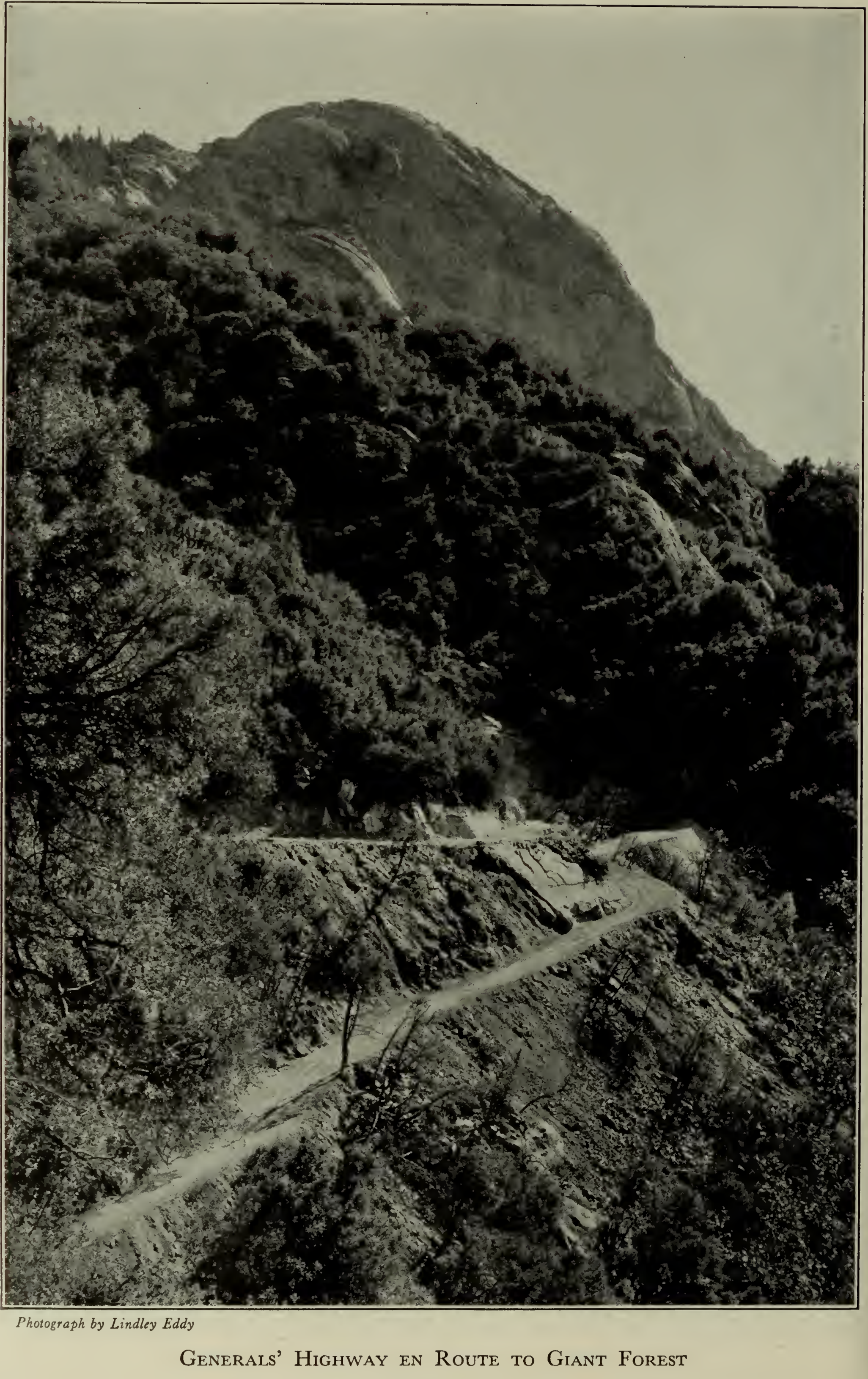
*Photograph by Lindley Eddy*

West Side of Moro Rock



*Photograph by Lindley Eddy*

Stairway up Moro Rock



*Photograph by Lindley Eddy*

GENERALS' HIGHWAY EN ROUTE TO GIANT FOREST

# THE GREATER SEQUOIA

TO THE north and east of the original Sequoia National Park lay an area of extraordinarily scenic country. Just as the park was supreme in its forest luxuriance, so the outlying country was supreme in rock-sculptured canyon and snowy summit.

Part of this area was added to the park in 1926, increasing it to an area of six hundred and four square miles. Thus was acquired the Kern Canyon—a Yosemitelike valley thirty miles in length—the whole of the Upper Kaweah watershed with the River Valley and Kaweah Peaks, and Mount Whitney.

Sequoia Park now contains the largest trees, and outside of Alaska, the largest mountain in the United States. It also has the greatest range in altitude of any of our national parks—from one thousand three hundred feet at the park boundary near Ash Mountain headquarters to fourteen thousand four hundred and ninety-six feet at the summit of Mount Whitney.

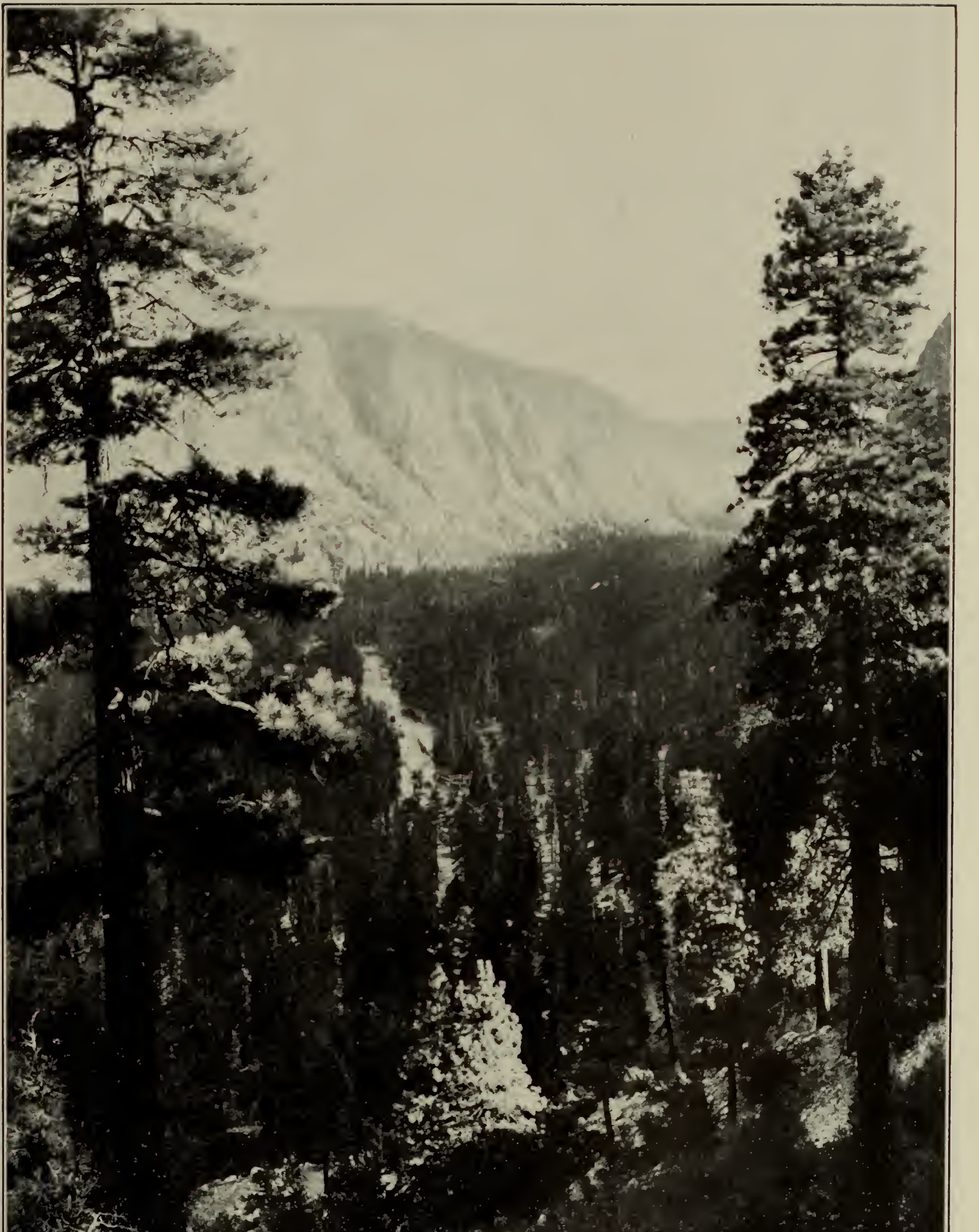
*Photograph by H. C. Tibbitts*

THE GOLDEN TROUT CREEK

The trout caught here are brilliantly golden. Many lakes and streams in the park have been stocked from this near-by stream

*Photograph by Lindley Eddy*

Big Kern Lake, Looking North up Kern River Canyon



*Photograph by Lindley Eddy*

LOOKING NORTHEAST DOWN KERN RIVER FROM RATTLESNAKE TRAIL

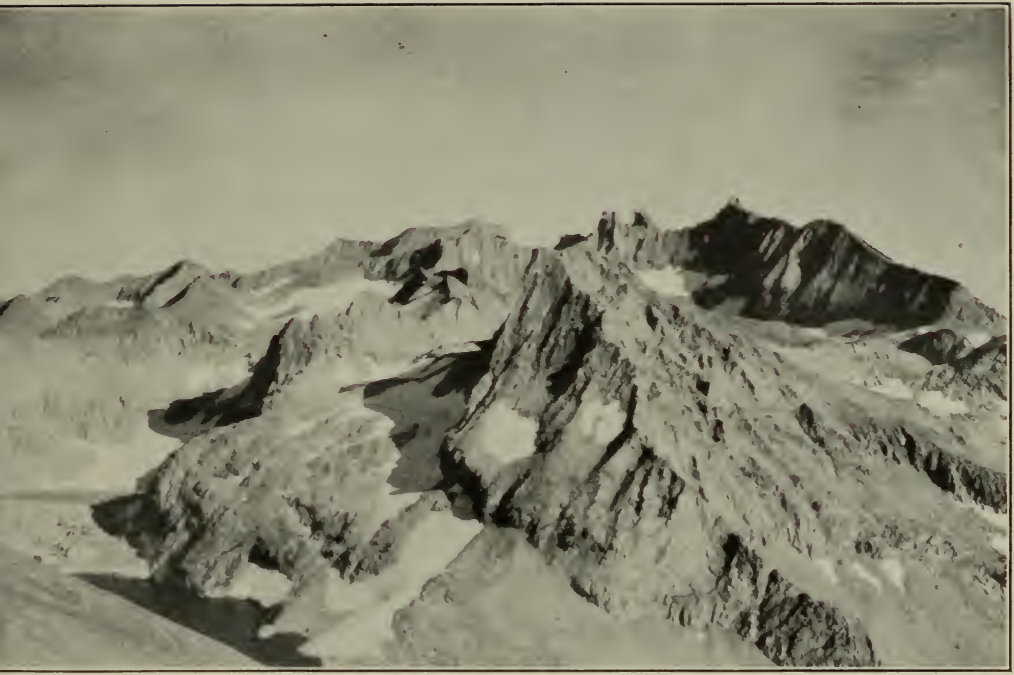
# KERN *and* KAWEAH CANYONS

THE Sierras contain many of those glaciated canyons to which John Muir gave the general designation of " yosemites " from the chief of them all—the Yosemite Valley. Two of the most notable of these yosemites were added to the Sequoia Park in 1926. These are the Kern Canyon and the Upper Kaweah Canyon or River Valley. The former is over thirty miles long with three-thousand-foot cliffs sculptured and painted in many forms and colors, and it contains the finest fishing stream in the Sierras—the Kern River with native rainbow trout up to nine or ten pounds in weight.

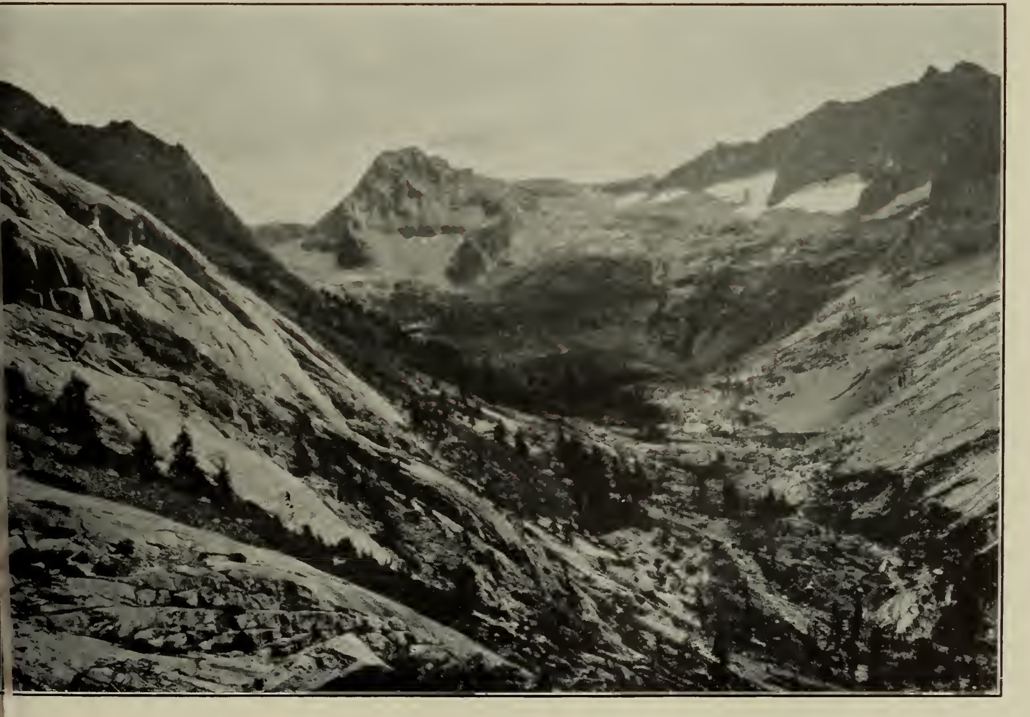
The Upper Kaweah Canyon contains in River Valley, Cliff Creek, Granite Creek, and other tributaries several true yosemites, with cliffs and domes towering thousands of feet above valley floors, streams, and lakes. This region is within a day's journey of the Big Tree groves at Giant Forest and is reached by excellent trails.

*Photograph by Lindley Eddy*

LOOKING DOWN KERN RIVER—KERN DOME IN DISTANCE



Lion Peak from Miners Pass



Upper End of Middle Fork of Kaweah River

*Photograph by Lindley Eddy*

FALLEN

This trunk measures 288 feet. Sequoia wood is almost indestructible

ANT

ept by fire. This tree may have been prostrate for many centuries

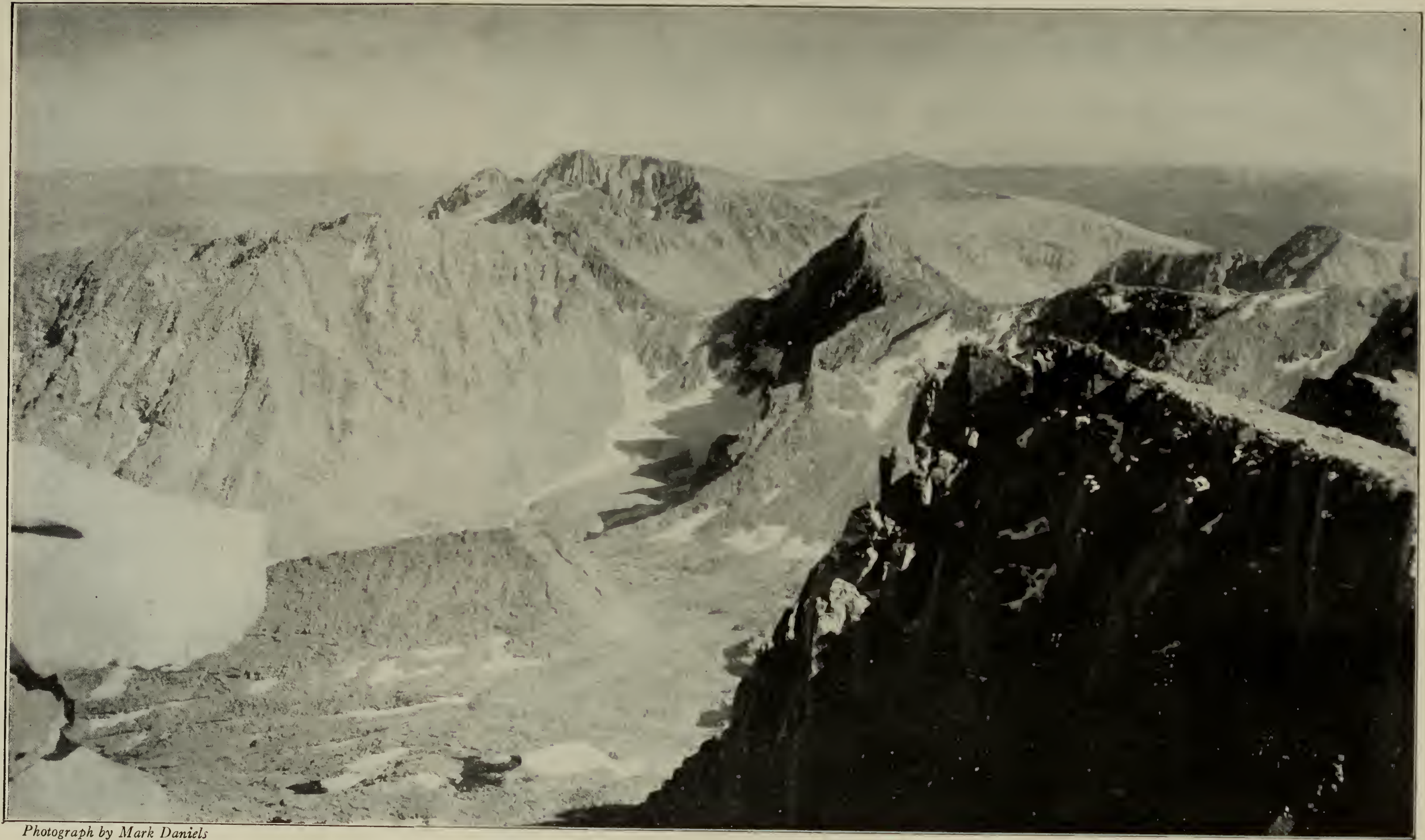
Cutting Trail Through Ice on Miners Pass

# SIERRA'S CREST, AND LOFTIEST MOUNTAIN

THE Sierra reaches its mightiest climax in Mount Whitney, the highest mountain in the United States outside of Alaska. No towering, isolated summit is Whitney, like Mount Rainier and Longs Peak, but literally a climax, for here the Sierra has massed her mountains, tumbled them willfully, recklessly, into one sprawling, titanic heap, as though this were the dumping ground for all left over after the making of America.

Out of this mass emerges one higher than the rest. That is Mount Whitney. Its altitude is 14,496 feet.

The journey to Whitney's summit is a progress of inspiration and climax. From Visalia automobiles carry you under the very shadow of the Big Trees. From there it is a matter of horseback and pack train—out of the Big Tree forest into red firs and little sugar pines; then up among the foxtail pines into the magic land of peaks above the timber line; up the headwaters of the Kaweah; across the splendors of the Great Western Divide; into and over the Kern; then up, up, up, threading passes, skirting precipices, rounding lakes, edging glaciers, to the top.



*Photograph by Mark Daniels*

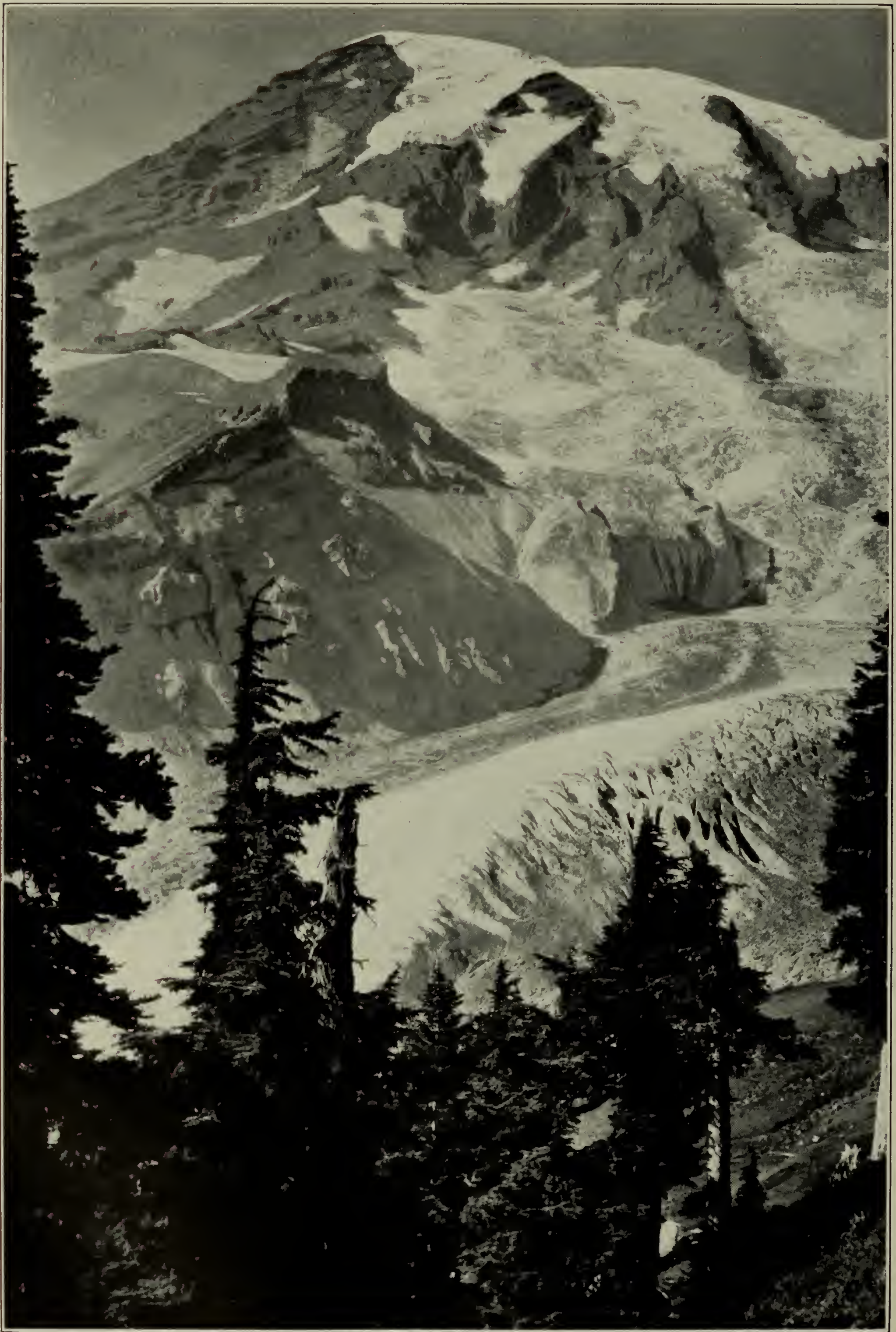
No Towering, Isolated Summit is Mount Whitney, Like Mount Rainier and Longs Peak, but Literally a Climax. Out of the Mass Emerges One Higher than the Rest; That is All

The Summit of Mount Whitney, Nearly Three Miles High

*Photograph by Emerson Hough*

The Stone Shelter on Mount Whitney's Summit

# MOUNT RAINIER NATIONAL PARK



*Photograph by Ranapar Studio*

A RIVER OF ICE 400 FEET THICK FLOWING FROM THE SHINING SUMMIT

Looking from a wild-flower slope down upon the celebrated Nisqually Glacier and up at Columbia Crest

SKYLINE TRAIL
Rainier National Park

*Photograph by Ranapar Studio*

PARTY READY TO START ON SKYLINE TRAIL TRIP

# THE FROZEN OCTOPUS

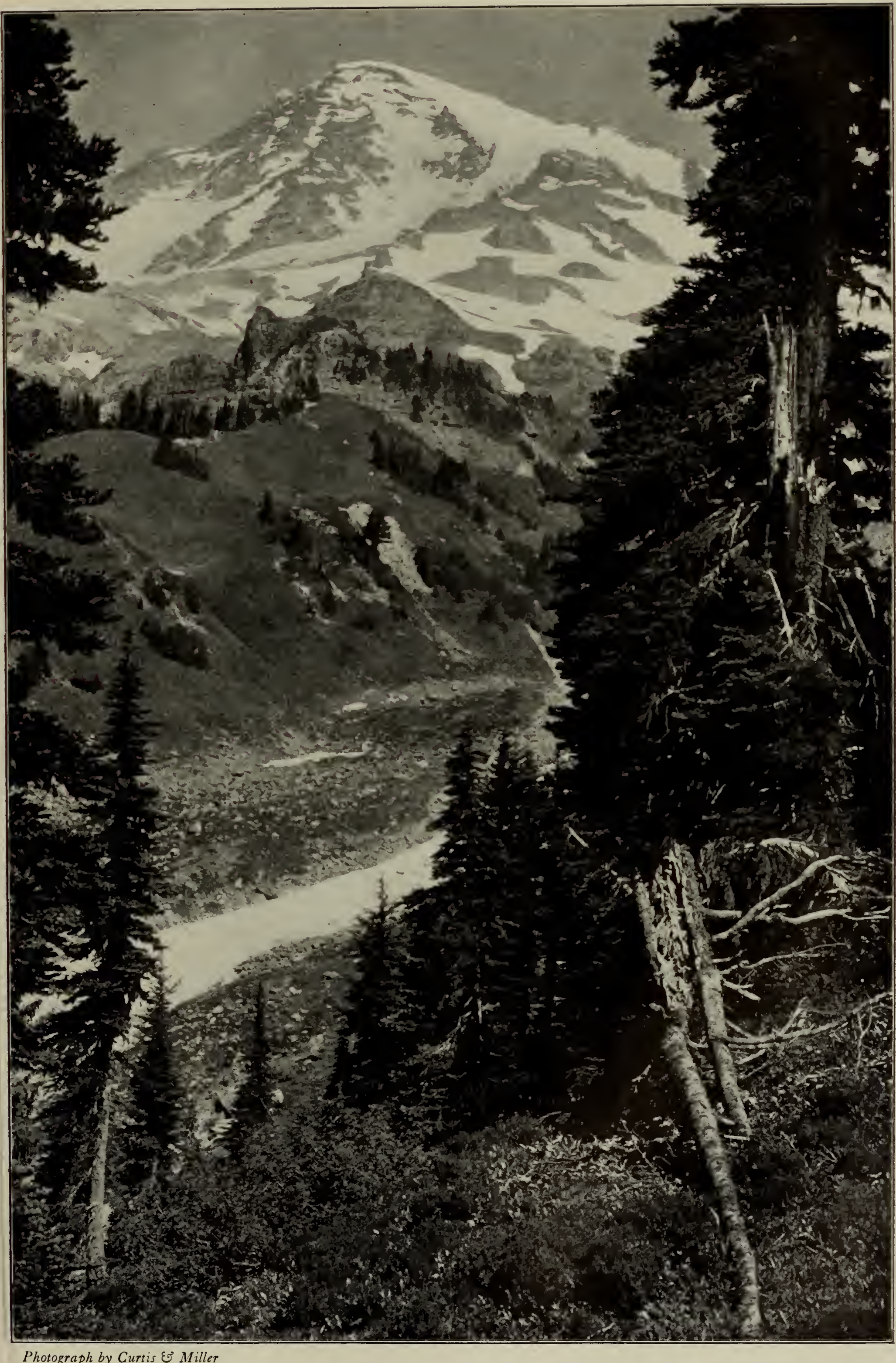
ALONG the western rim of the North American Continent, bordering the Pacific Ocean, rises a series of volcanoes which once blazed across the sea like giant beacons. To-day, their fires quenched, they suggest a stalwart band of Knights of the Ages, helmeted in snow, armored in ice, standing at parade upon a carpet patterned gorgeously in wild flowers.

Easily chief of this knightly band is Mount Rainier, a giant towering fourteen thousand four hundred and eight feet above tidewater in Puget Sound. Home-bound sailors far at sea mend their courses from his silver summit.

This mountain has a glacier system far exceeding in size and impressive beauty that of any other in the United States. From its snow-covered summit twenty-eight rivers of ice pour slowly down its sides. Seen upon the map, as if from an airplane, one thinks of it as an enormous frozen octopus stretching icy tentacles down upon every side among the rich gardens of wild flowers and splendid forests of firs and cedars below.

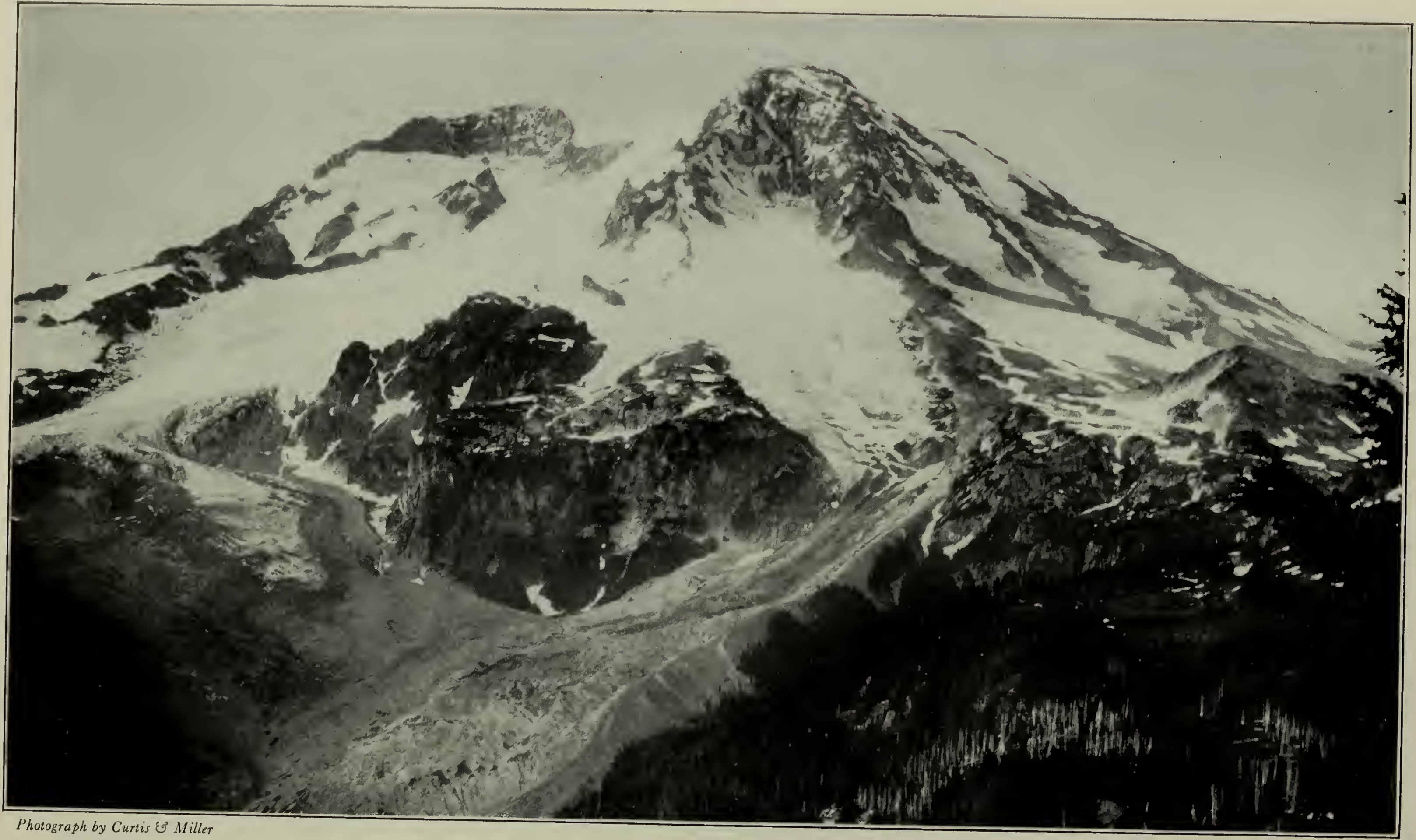
*Photograph by Ranapar Studio*

Group of Hikers Near Edith Falls



*Photograph by Curtis & Miller*

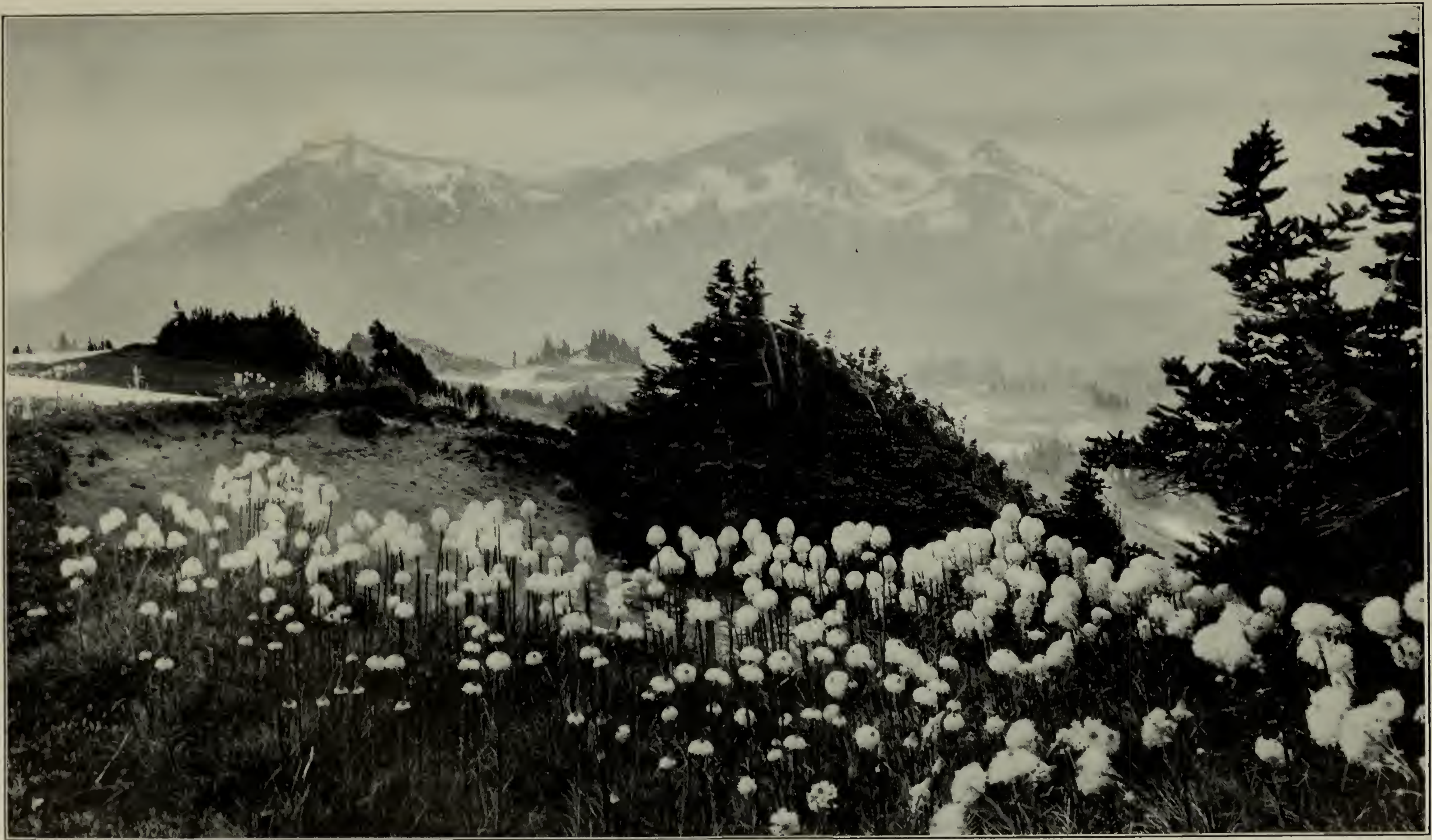
From Under the Shadowy Firs of Van Trump Park It Glistens Startlingly



Photograph by Curtis & Miller

THE TWO TAHOMA GLACIERS MAY BE SEEN THROUGH THEIR WHOLE COURSES FROM INDIAN HENRYS HUNTING GROUND

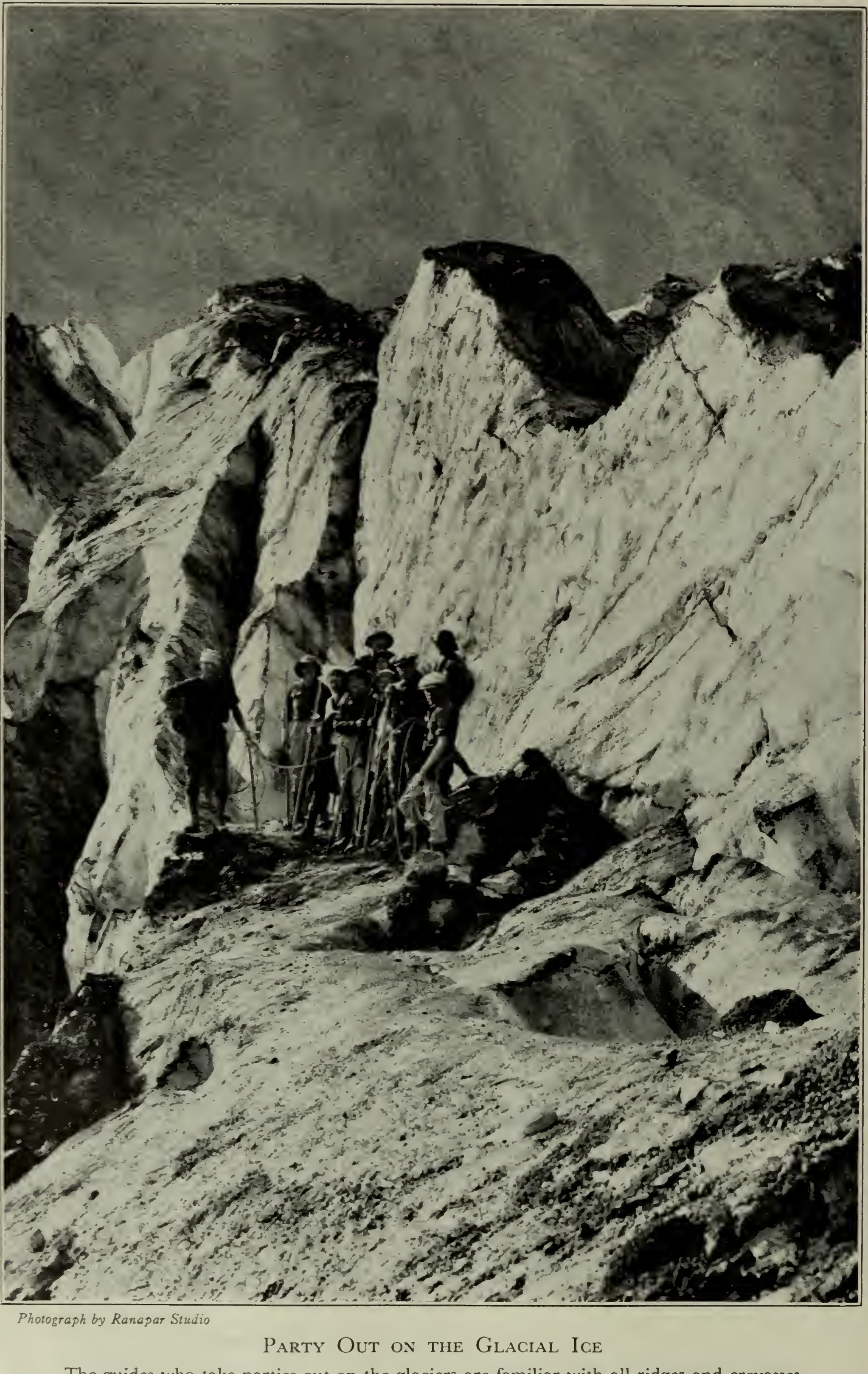
The Tahoma, on the left, begins at the summit; the South Tahoma begins in the cirque just below Point Success, the highest point shown in the picture; they circle in opposite directions around rocky Glacier Island and join in the foreground



*Photograph by Curtis & Miller*

EVERYWHERE, BETWEEN AND TOUCHING THE ICY GLACIER FINGERS, ARE GORGEOUS GARDENS OF LUXURIANT WILD FLOWERS

"As if Nature," writes John Muir, "glad to make an open space between woods so dense and ice so deep, were economizing the precious ground"



*Photograph by Ranapar Studio*

PARTY OUT ON THE GLACIAL ICE

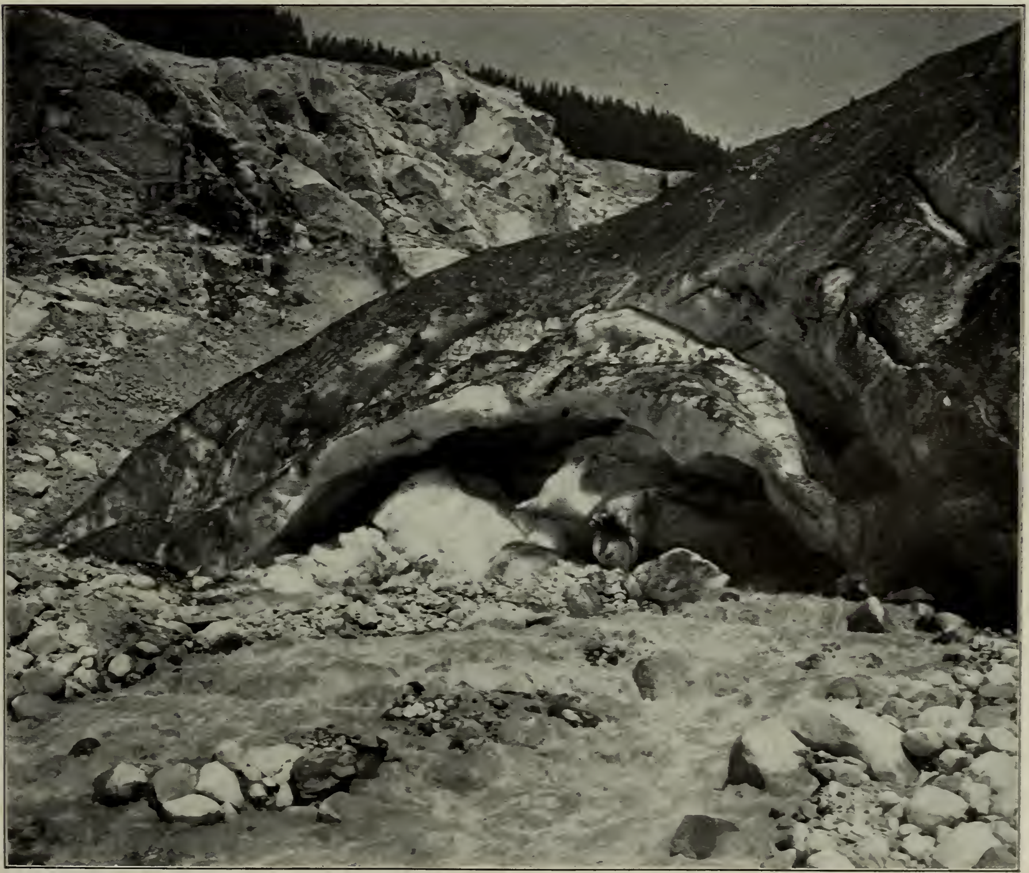
The guides who take parties out on the glaciers are familiar with all ridges and crevasses

# THE GIANT RIVERS OF ICE

EVERY winter the moisture-laden winds from the Pacific, sweeping inland, cool suddenly upon the slopes of the great mountain and deposit there snow in enormous depths. Summer's sun melts only a portion of this snowfall.

Thus are born the glaciers, for the snow under its own pressure quickly hardens into ice. Through twenty-eight valleys, self-carved, in the solid rock, flow these rivers of ice, now turning, as rivers of water turn, to avoid the harder rock strata, now roaring over precipices like congealed water falls, now rippling, like water currents, over rough bottoms, pushing, pouring relentlessly on until they reach those parts of their courses where warmer air turns them into rivers of water.

There are forty-eight square miles of these glaciers.



*Photograph by Curtis & Miller*

SNOUT OF THE NISQUALLY GLACIER WHERE THE NISQUALLY RIVER BEGINS

The visitor may park his car at the Nisqually Glacier Bridge and in a few minutes walk along an excellent trail to within a short distance of this point

*Photograph by Curtis & Miller*

CLOSE TO THE SUMMIT OF MOUNT RAINIER

*Photograph by Ranapar Studio*

ON THE WAY TO THE SUMMIT OF PINNACLE PEAK, ONE OF THE MOST INTERESTING AND POPULAR CLIMBS IN THE TATOOSH RANGE

# IN AN ARCTIC WONDERLAND

MOUNT RAINIER is nearly three miles high, measured from sea level. It rises nearly two miles from its immediate base. From Puget Sound it seems to rise directly from sea level—a symmetrical volcano cone—but as the mountain is approached its rugged glacial valleys are more easily perceived.

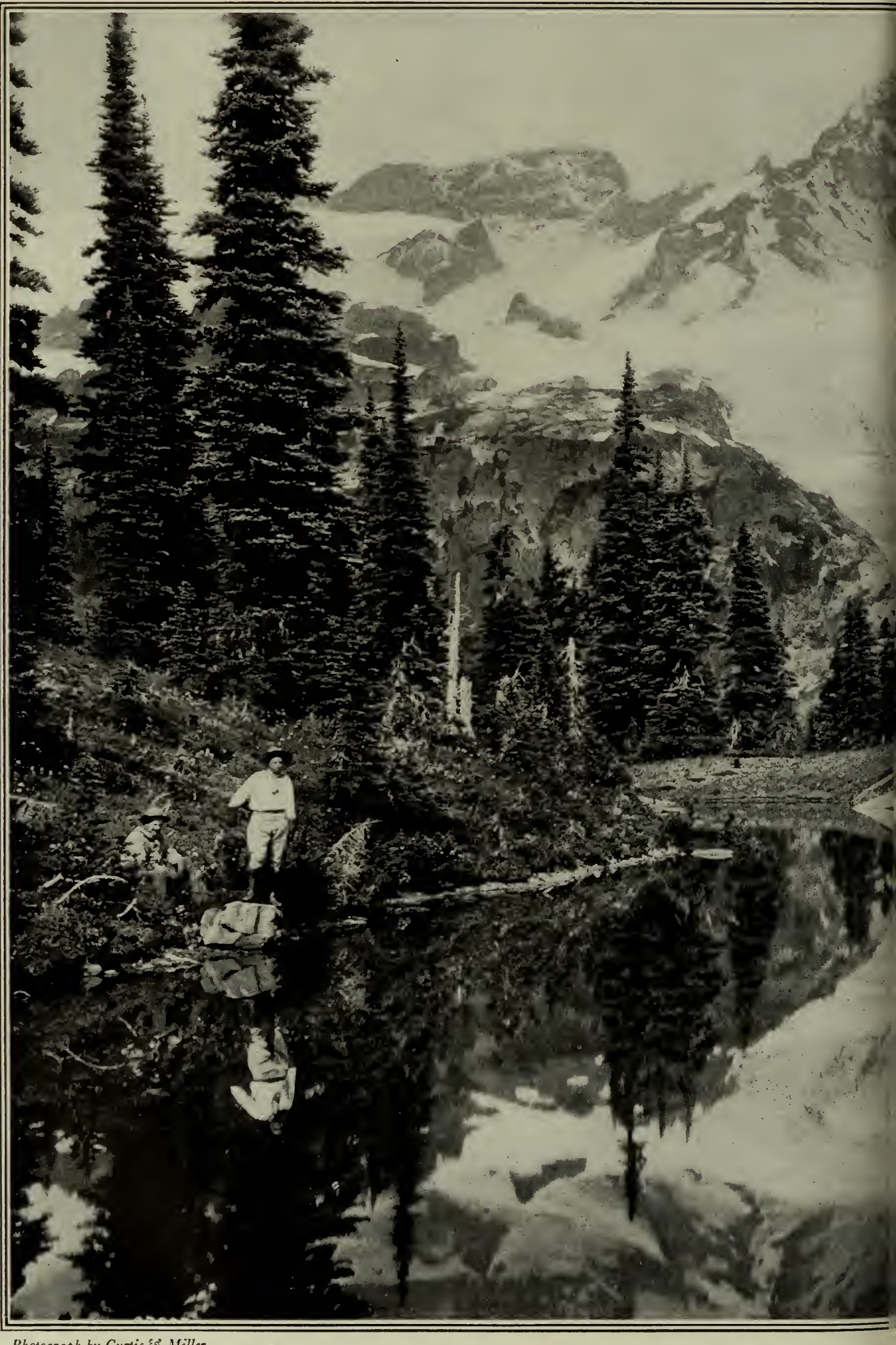
In addition to the twenty-eight named glaciers there are others yet unnamed and little known. Few visitors have seen the wonderful north side, a photograph of which will be found on a later page. It possesses possibilities for the development of a route to Columbia Crest, the wonderful snow-covered summit which is the third highest peak in the United States.

Many interesting things might be told of the glaciers were there space. For example, several species of minute insects live in the ice, hopping about like tiny fleas. They are harder to see than the so-called sand fleas at the seashore because much smaller. Slender, dark-brown worms live in countless millions in the surface ice.

Microscopic rose-colored plants also thrive in such great numbers that they tint the surface here and there, making what is commonly called "red snow."

*Photograph by Ranapar Studio*

COASTING IN WINTER AT LONGMIRE SPRINGS



*Photograph by Curtis & Miller*

One of the Great Spectacles of America is Mount Rainier, from Indian Henrys

nting Ground, Glistening Against the Sky and Pictured Again in Mirror Lake

# GLACIER *and* WILD FLOWER

PROBABLY no other glacier of large size is so quickly, easily, and comfortably reached as the most striking and celebrated, though by no means the largest, of Mount Rainier's, the Nisqually Glacier. It descends directly south from the snowy summit in a long curve, its lower finger bisecting park-like glades of luxuriant wild flowers to within less than a quarter mile of the highway at the Nisqually Glacier Bridge. From Paradise Valley one may hike over a good trail to the moraine that borders the ice and from that point reach the fissured surface of the glacier itself.

The Nisqually Glacier is five miles long and at Paradise Park is half a mile wide. Glistening white and fairly smooth at its shining source on the mountain's summit, its surface here is soiled with dust and broken stone and squeezed and rent by terrible pressure into fantastic shapes. Innumerable crevasses, or cracks many feet deep, break across it caused by the more rapid movement of the glacier's middle than its edges; for glaciers, like rivers of water, develop swifter currents nearer midstream.

Professor Le Conte tells us that the movement of Nisqually Glacier in summer averages, at midstream, about sixteen inches a day. It is far less at the margins, its speed being retarded by the friction of the sides.

Like all glaciers, the Nisqually gathers on its surface masses of rock with which it strews its sides just as rivers of water strew their banks with rocks and floating débris. These are called lateral moraines, or side moraines. Sometimes glaciers build lateral moraines miles long.

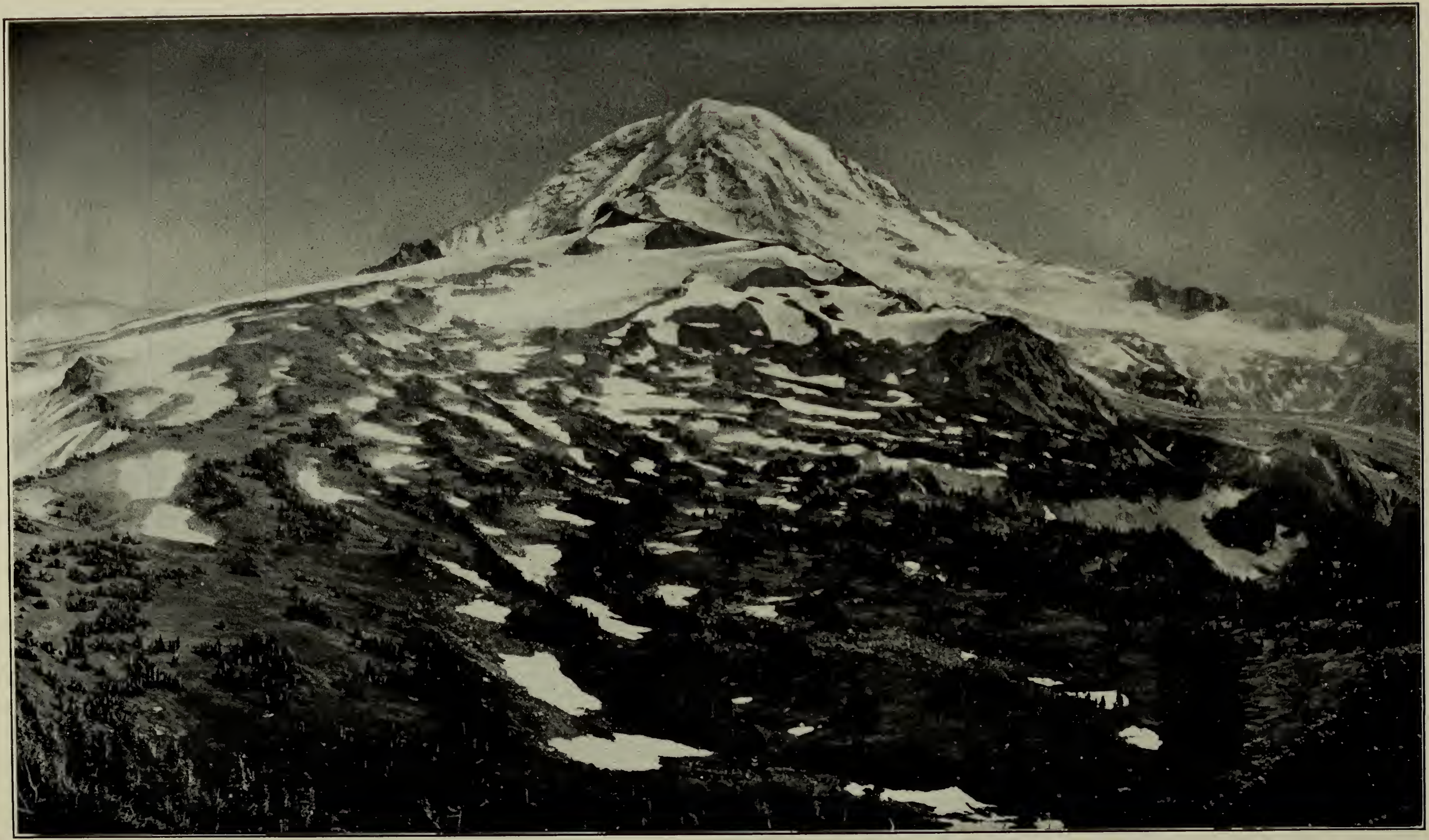
The rocks which are carried in midstream to the end of the glacier and dropped when the ice melts are called the terminal moraine. The end, or snout, of the glacier thus lies among a mass of rocks and stones. The Nisqually River generally flows from a cave in the end of the Nisqually Glacier's snout. The river is dark brown when it first appears because it carries sediment and powdered rock.

But this brief picture of the Mount Rainier National Park would miss its loveliest touch without some notice of the wild-flower parks lying at the base and often reaching far up between the icy fingers of Mount Rainier.

"Above the forests," writes John Muir, the celebrated naturalist, " there is a zone of the loveliest flowers, fifty miles in circuit and nearly two miles wide, so closely planted and luxurious that it seems as if nature, glad to make an open space between woods so dense and ice so deep, were economizing the precious ground and trying to see how many of her darlings she can get together in one mountain wreath—daisies, anemones, columbine, erythroniums, larkspurs, etc., among which we wade knee-deep and waist-deep, the bright corollas in myriads touching petal to petal. Altogether this is the richest subalpine garden I have ever found, a perfect flower Elysium."

*Photograph by Curtis & Miller*

Mount Adams from Mount Rainier—Forty Miles Southward



*Copyrighted by W. P. Romans, Seattle*

SPRAY PARK

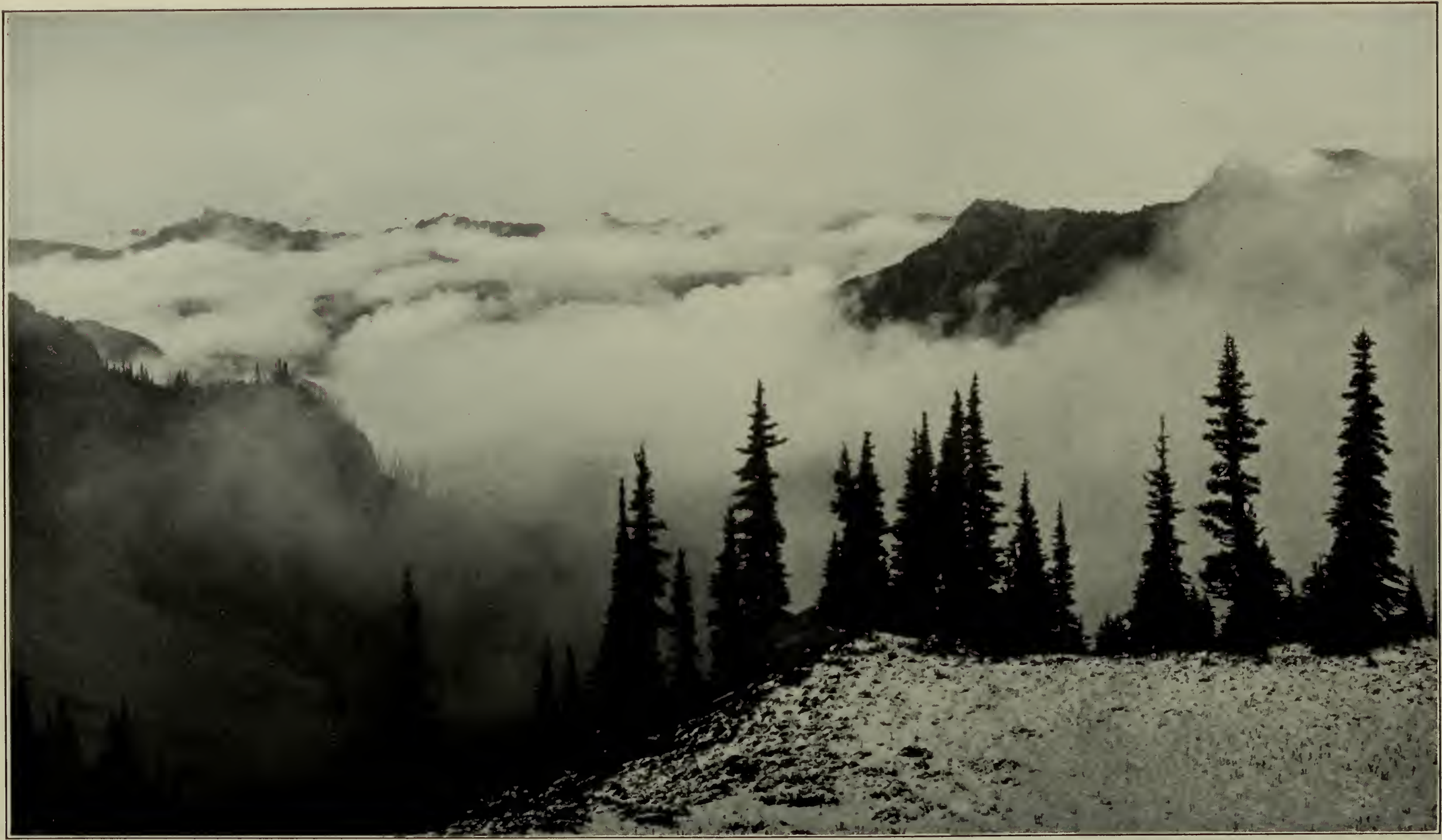
The northwest slope of Mount Rainier will soon become the health and pleasure garden of many thousands. This superb slope has been seen by few visitors, owing to its inaccessibility, but a road to this section is under construction

*Photograph by Curtis & Miller*

Beautiful Paradise Valley Showing the Tatoosh Ridge

*Photograph by Curtis & Miller*

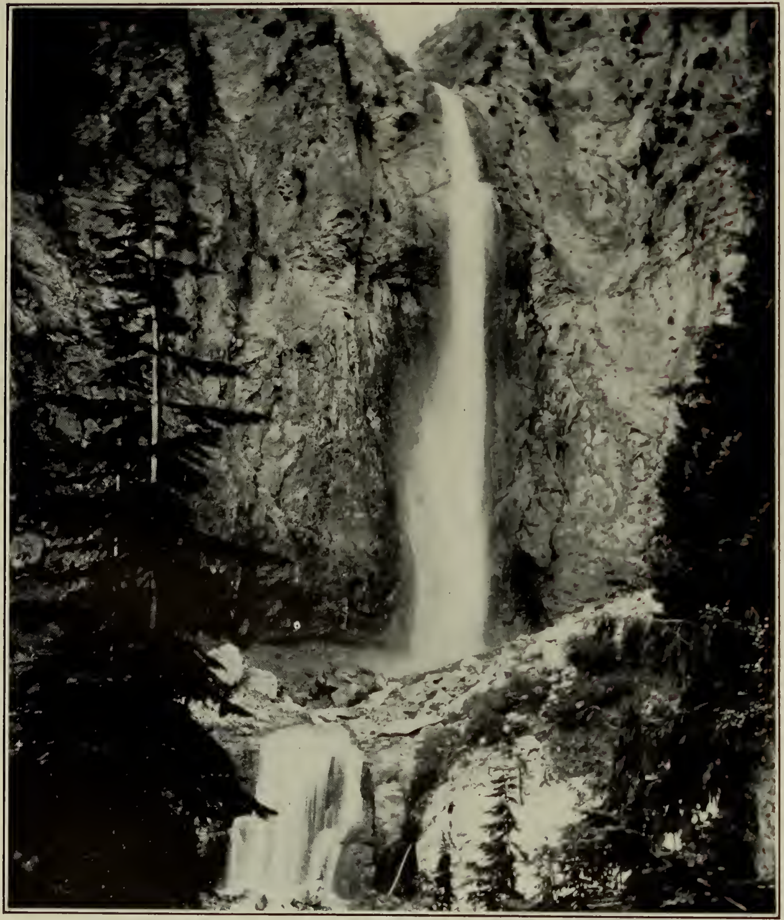
Timber Line and Flower Fields in Beautiful Paradise Valley



*Photograph by Curtis & Miller*

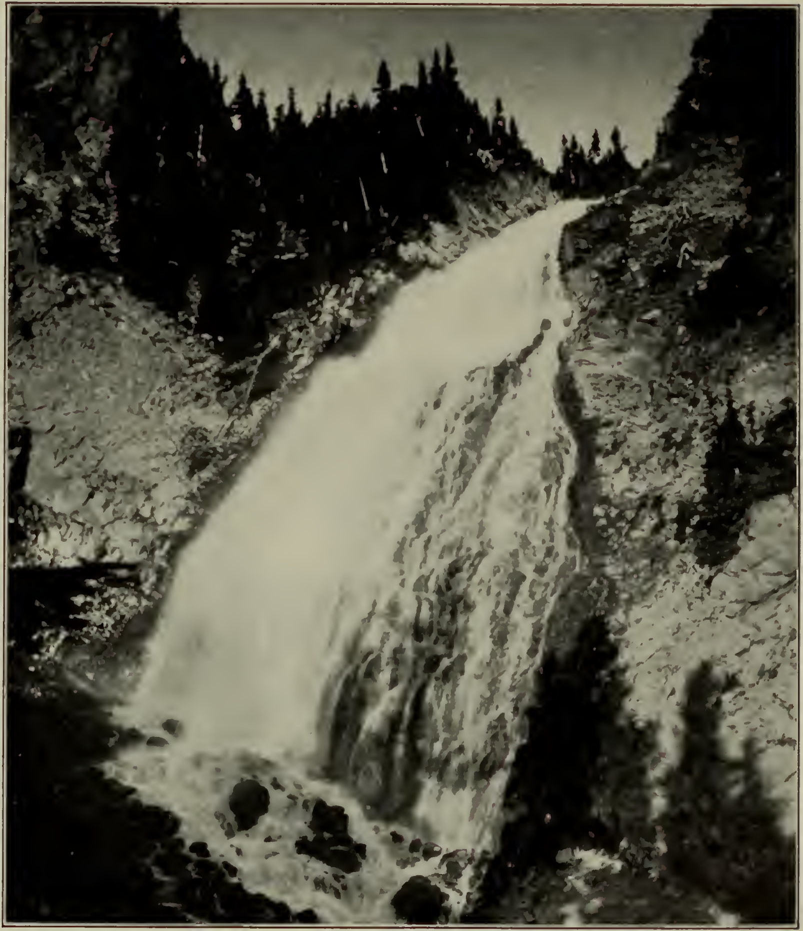
The Mornings Often Roll Tossing Seas of Mist into the Valleys, from Which Emerge at Intervals Craggy Tops, Glistening Glaciers, and Far-Distant Mountain Peaks

This photograph was taken from a height at Indian Henrys. Mount St. Helens is lost in the mists forty miles away



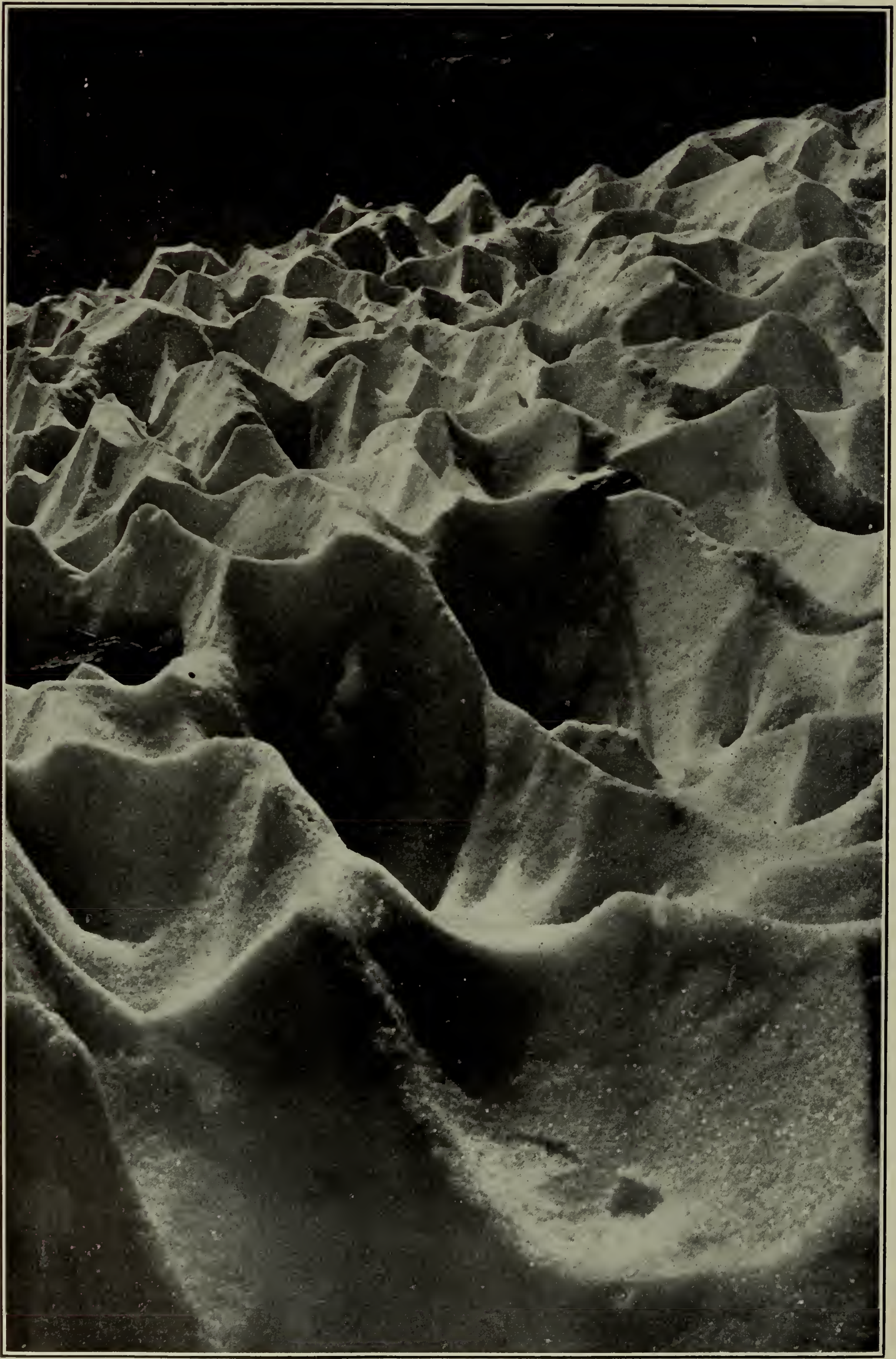
*Photograph by Curtis & Miller*

COMET FALLS



*Photograph by Curtis & Miller*

SLUISKIN FALLS

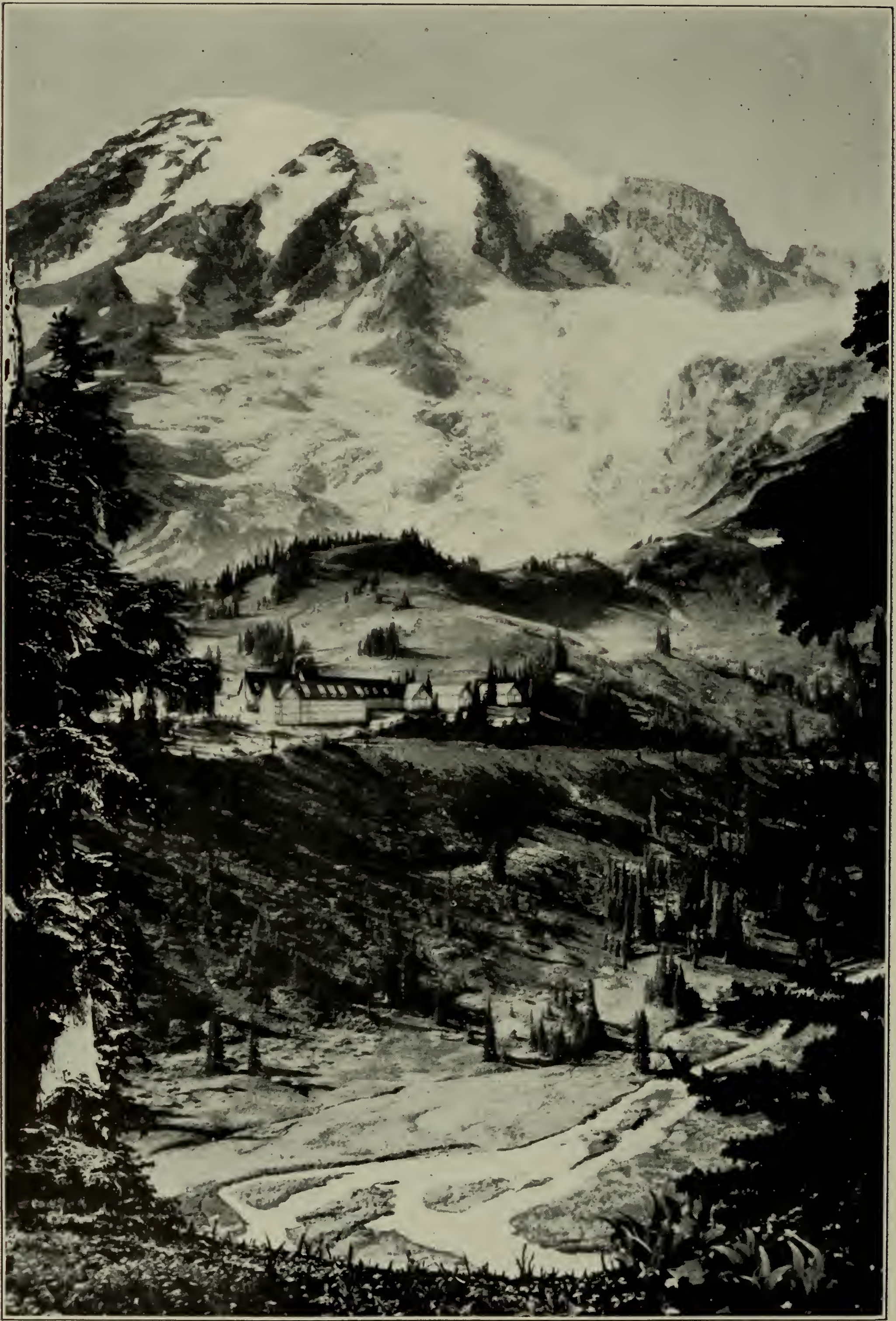


*Photograph by A. H. Barnes*

SNOW CUPS

NATURE STUDY

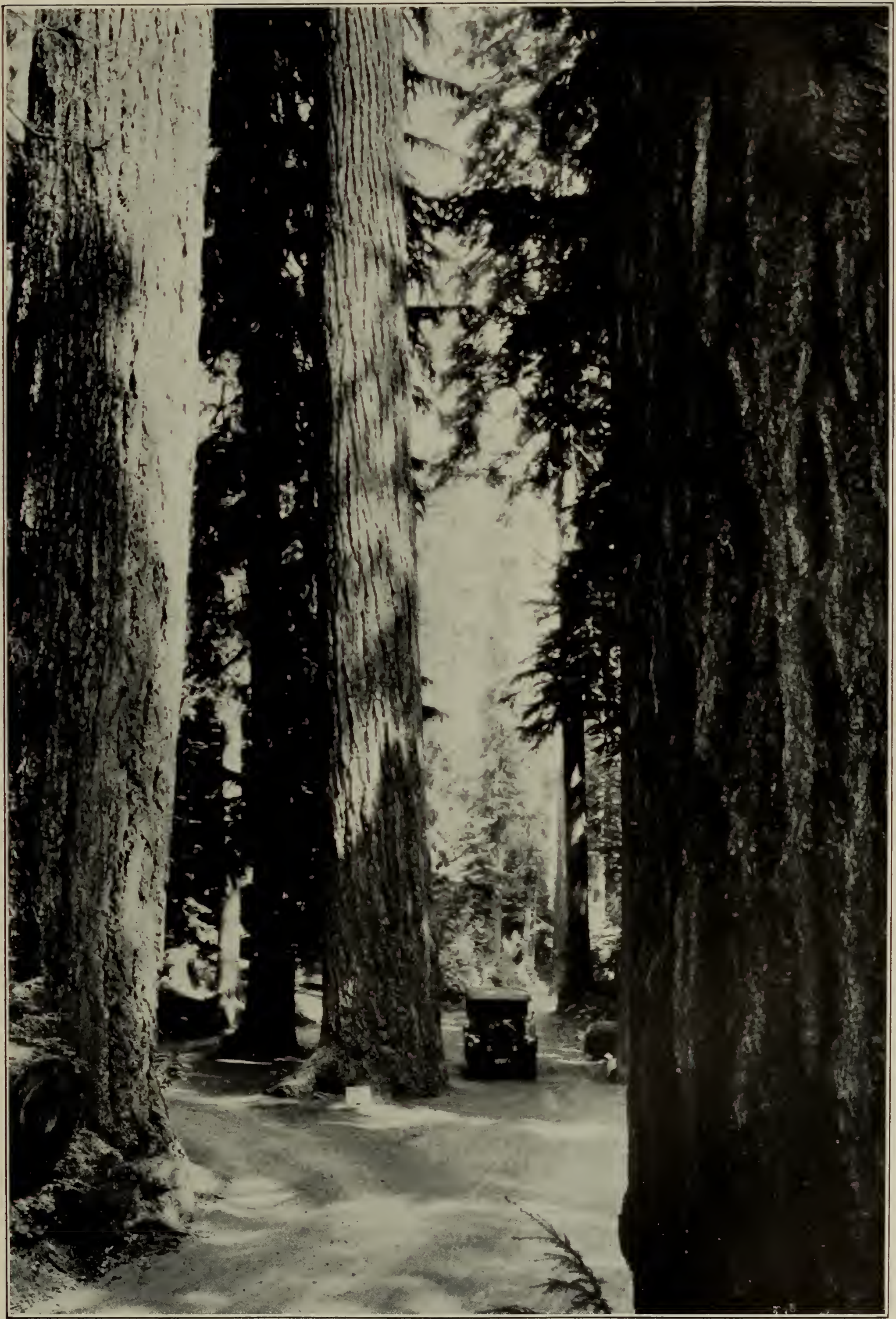
Visitors on trail in Paradise Valley, under the guidance of a ranger naturalist



*Photograph by Ranapar Studio*

Paradise Inn, in Paradise Valley

Only 30 minutes' walk from the edge of Nisqually Glacier Canyon, where one may view to best advantage the mountain's third largest glacier



*Photograph by Ranapar Studio*

The Roads Lead to the Glaciers Through Forests of Fir and Cedar

These trees measure 10 and 12 feet in diameter

# EASIEST GLACIERS TO SEE

THE Mount Rainier National Park is so accessible that one may get a brief close-by glimpse in one day. The railroad slogan, "Four hours from Tacoma to the Glaciers," tells the story.

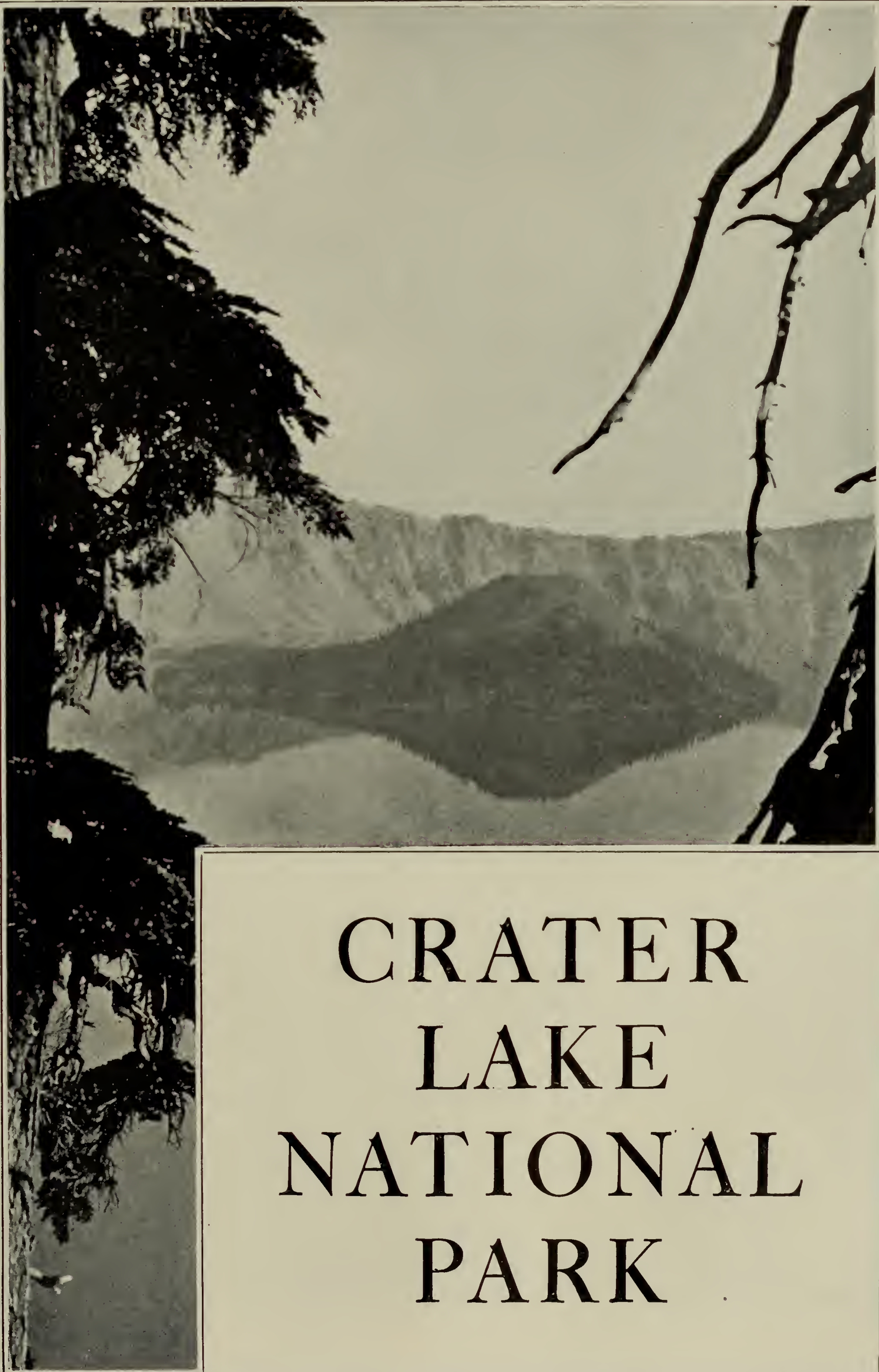
But no one, unless under dire necessity, should think of being so near one of the greatest spectacles in nature without sparing several days for a real look; several weeks is none too long. Thousands of Americans in normal years go to Switzerland to see glaciers much harder to reach and far less satisfactory to study.

Excellent roads carry the visitor by autostage from the coast cities and railway terminus to the several hotels and camps, which are so located that the principal scenic points on the south side may be easily reached. Other scenic wonderlands of the great playground are being made accessible by new roads under construction.

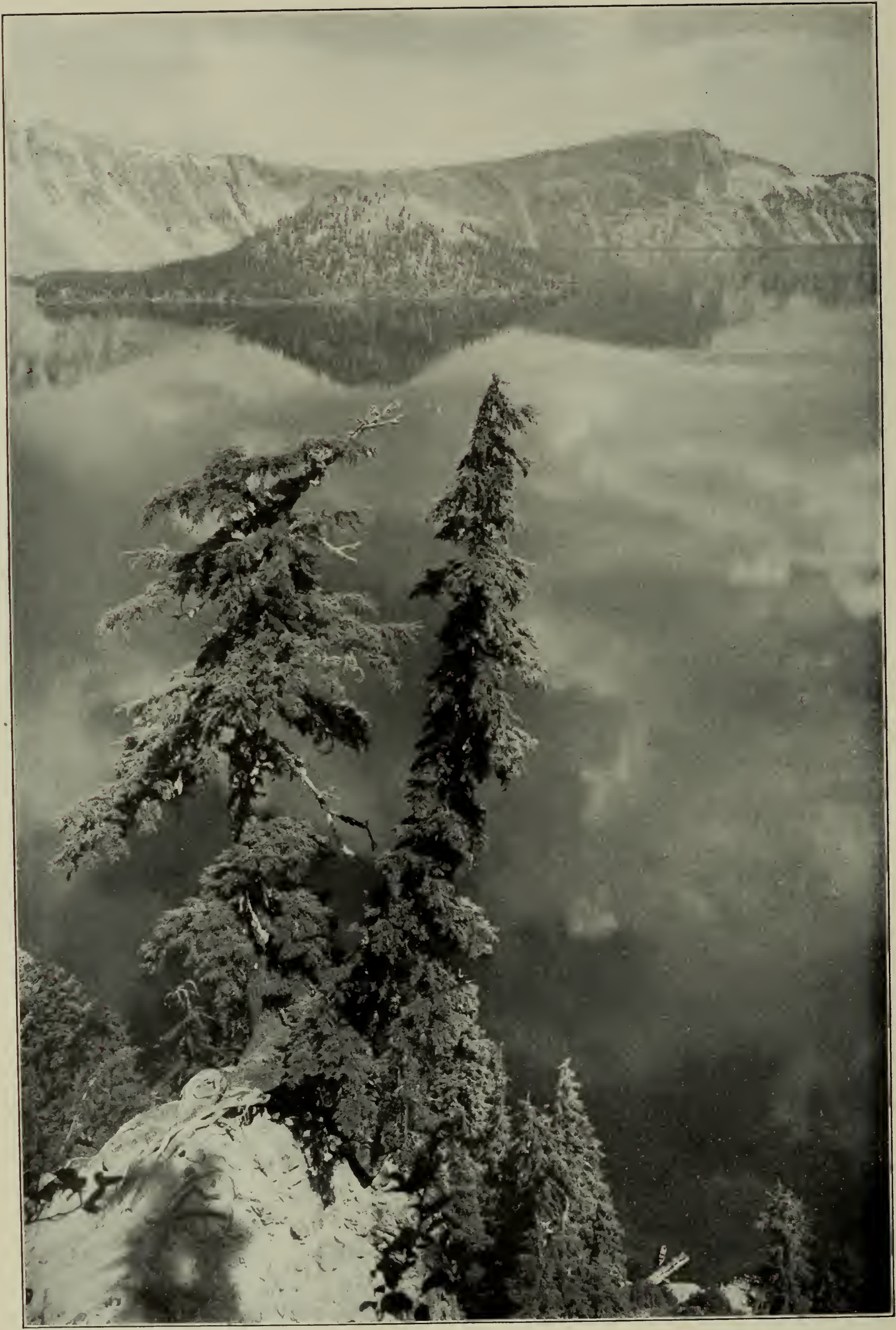
Pedestrians and horseback riders also follow trails through the gorgeous wild-flower parks, Paradise Valley, Indian Henrys Hunting Ground, Van Trump Park, Cowlitz Park, Ohanapecosh River and its hot springs, Summerland, Grand Park, Moraine Park, Elysian Fields, Spray Park, Natural Bridge, Cataract Basin, St. Andrews Park, and others, developing new points of view of wonderful glory.

*Photograph by Ranapar Studio*

A SECTION OF THE PARADISE PUBLIC CAMP GROUNDS

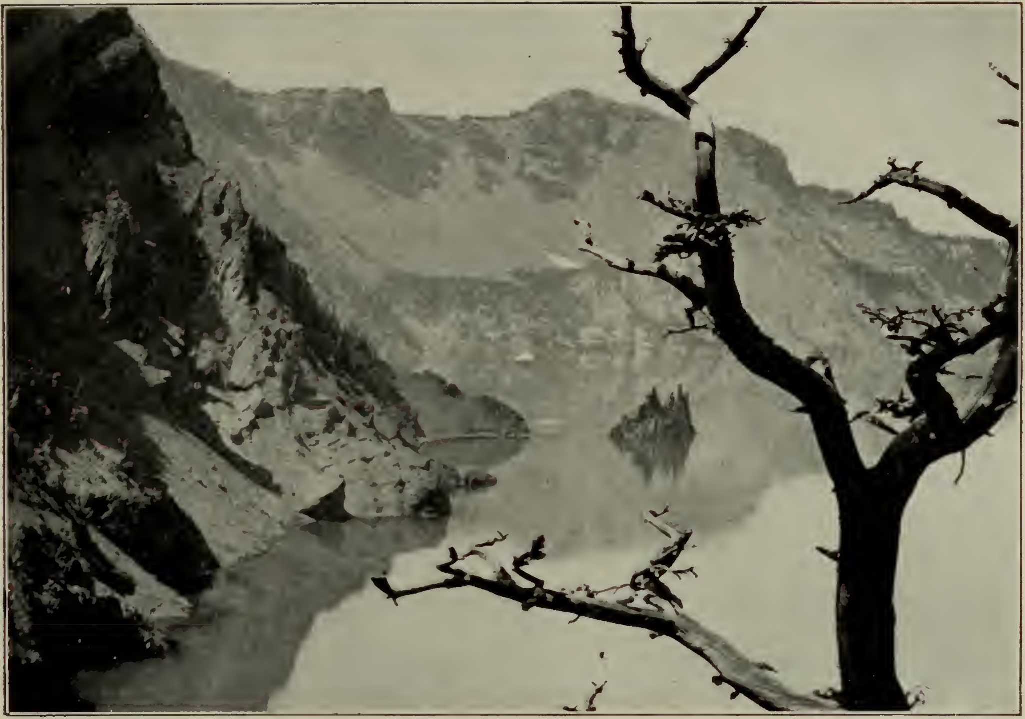


# CRATER LAKE NATIONAL PARK



*Photograph by Fred H. Kiser, Portland, Oreg.*

LOOKING INTO ITS VAST DEPTHS IS LIKE LOOKING INTO THE LIMITLESS SKY



*Photograph by U. S. Reclamation Service*

THE PHANTOM SHIP—STRANDED ON A MAGIC SHORE

# THE LAKE OF MYSTERY

CRATER LAKE is the deepest and the bluest fresh-water lake in the world. It measures two thousand feet of solid water, and the intensity of its color is unbelievable even while you look at it. Its cliffs from sky line to surface average over a thousand feet high. It has no visible inlet or outlet, for it occupies the hole left when, in the dim ages before man, a volcano collapsed and disappeared within itself.

It is a gem of wonderful color in a setting of pearly lavas relieved by patches of pine green and snow white—a gem which changes hue with every atmospheric change and every shift of light.

There are crater lakes in other lands; in Italy, for instance, in Germany, India, and Hawaii. The one lake of its kind in the United States is by far the finest of its kind in the world. It is one of the most distinguished spots in a land notable for the nobility and distinction of its scenery.

Crater Lake lies in southern Oregon. The volcano whose site it has usurped was one of a " noble band of fire mountains, which, like beacons, once blazed along the Pacific coast." Because of its unique character and quite extraordinary beauty it was made a national park in 1902.

*Photograph by Patterson*

THE SUN PLAYS WONDERFUL TRICKS WITH LIGHTS AND SHADOWS

# "THE SEA OF SILENCE"

NEARLY every visitor to Crater Lake, even the most prosaic, describes it as mysterious. To those who have not seen it, the adjective is difficult to analyze, but the fact remains.

The explanation may lie in Crater Lake's remarkable color scheme. The infinite range of grays, silvers, and pearls in the carved and fretted lava walls, the glinting white of occasional snow patches, the olives and pine greens of woods and mosses, the vivid, cloud-flecked azure of the sky, and the lake's thousand shades of blue, from the brilliant turquoise of its edges to the black blue of its depths of deepest shadow, strike into silence the least impressionable observers. "The Sea of Silence," Joaquin Miller calls Crater Lake.

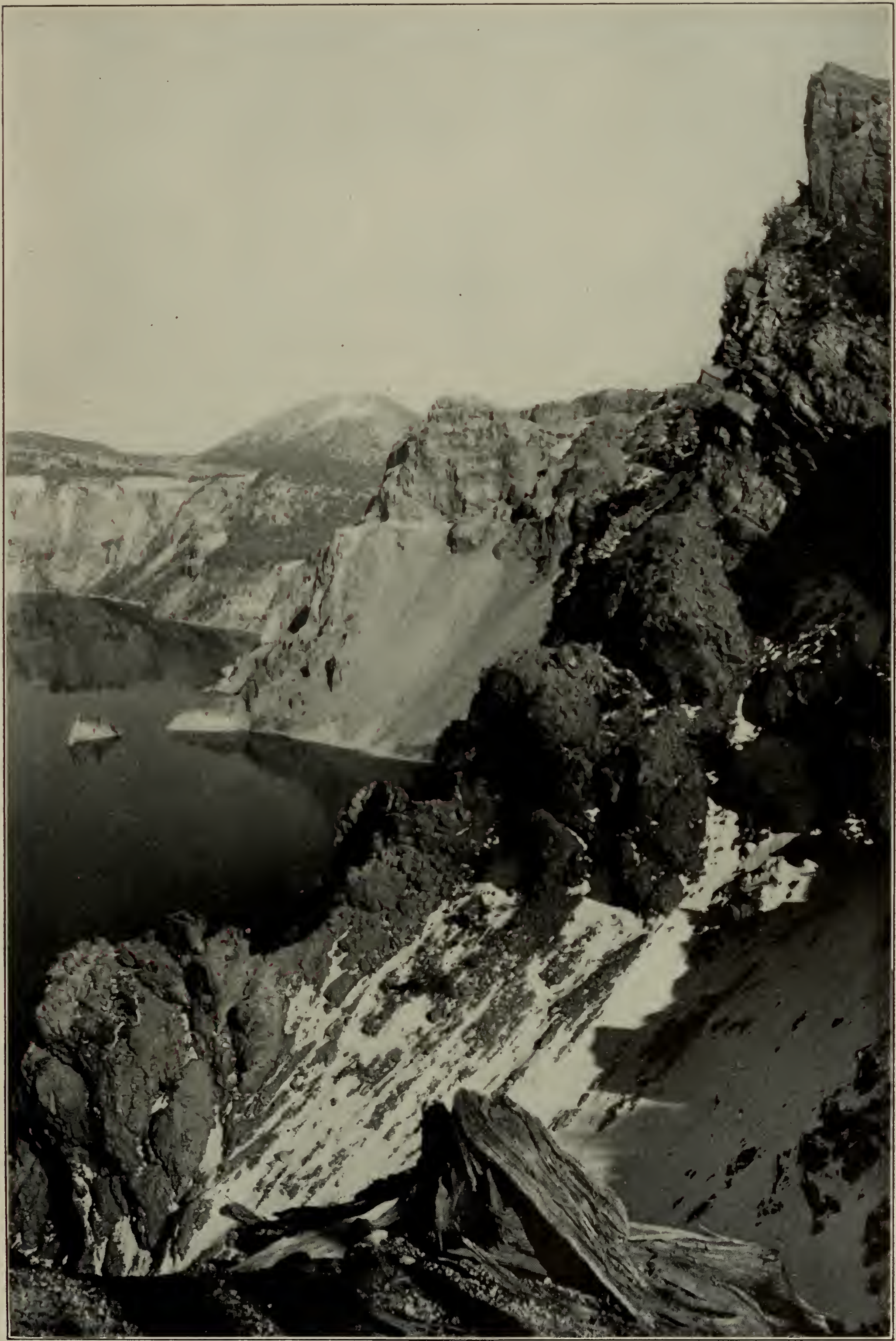
With changing conditions of sun and air, this amazing spectacle changes key with the passing hours; and it is hard to say which is its most rapturous condition of beauty, that of cloudless sunshine or that of twilight shadow; or of what intermediate degree, or of storm or of shower or of moonlight or of starlight. At times the scene changes magically while you watch.

*Photograph by Patterson*

EVENING SHADOWS

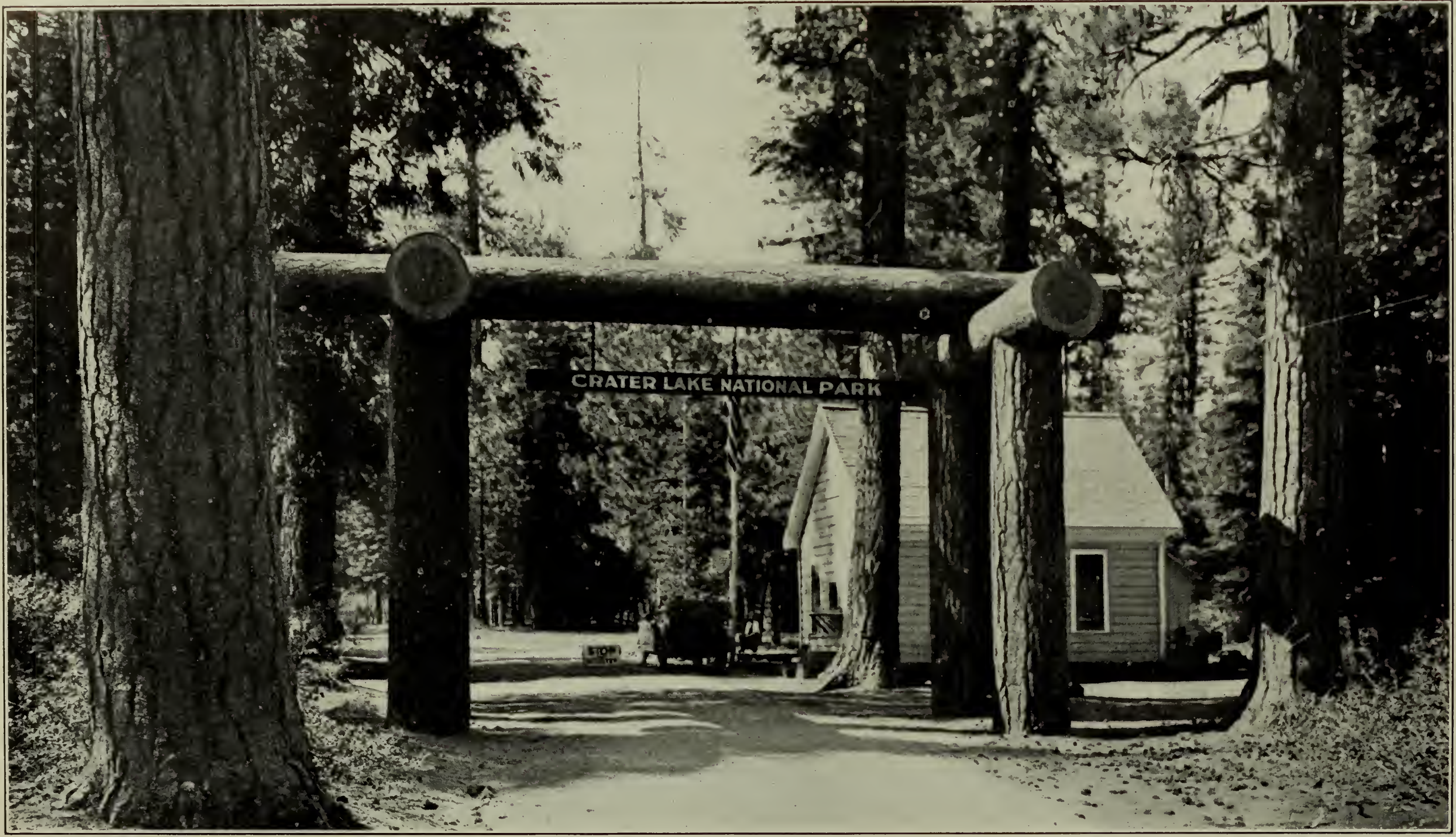
*Copyright by Fred H. Kiser, Portland, Oreg.*

A Scenic Tapestry Viewed from the Rim Trail



*Photograph by Fred H. Kiser, Portland, Oreg.*

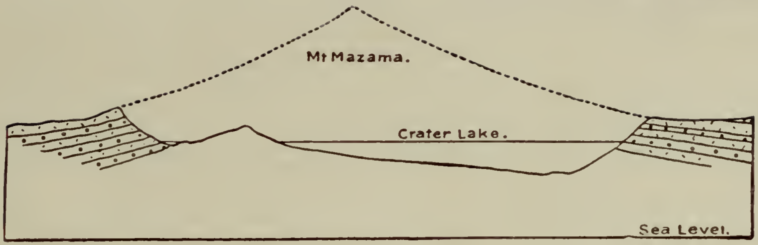
Cliffs of a Thousand Pearly Hues Fantastically Carved


CRATER LAKE NATIONAL PARK
STOP

*Copyright by Patterson*

The Klamath Entrance

The park is a wonderful exhibit of typical western forests in a virgin state



# STORY OF MOUNT MAZAMA

FEW of the astonishing pictures which geology has restored for us of this world in its making are so startling as that of Mount Mazama, which once reared a smoking peak many thousands of feet above the present peaceful level of Crater Lake. There were many noble volcanoes in the range: Mount Baker, Mount Rainier, Mount Adams, Mount St. Helens, Lassen Peak, Mount Mazama, Mount Hood, Mount Shasta. Once their vomitings built the great Cascade Mountains. To-day, cold and silent, they stand wrapped in shining armor of ice.

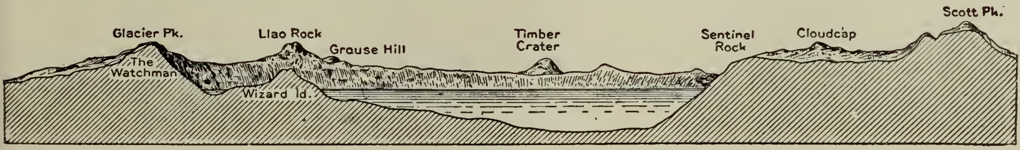
But not all. One is missing. Where Mount Mazama reared his noble head, there is nothing—until you climb the slopes once his foothills, and gaze spellbound over the broken lava cliffs into the lake which lies magically where once he stood. The story of the undoing of Mount Mazama, of the birth of this wonder lake, is one of the great stories of the earth.

Mount Mazama fell into itself. It is as if some vast cavern formed in the earth's seething interior into which the entire volcano suddenly slipped. The imagination of Doré might have reproduced some hint of the titanic spectacle of the disappearance of a mountain fifteen thousand feet in height.

When Mount Mazama collapsed into this vast hole, leaving clean cut the edges which to-day are Crater Lake's surrounding cliffs, there was instantly a surging back. The crumbling lavas were forced again up the huge chimney.

But not all the way. The vent became jammed. In three spots only did the fires emerge again. Three small volcanoes formed in the hollow.

But these in turn soon choked and cooled. During succeeding ages springs poured their waters into the vast cavity, and Crater Lake was born. Its rising waters covered two of the small volcanic cones. The third still emerges. It is called Wizard Island.



*Photograph by Fred H. Kiser, Portland, Oreg.*

SUNSET

# THE LEGEND OF LLAO

ACCORDING to the legend of the Klamath and Modoc Indians the mystic land of Gaywas was the home of the great god Llao. His throne in the infinite depths of the blue waters was surrounded by his warriors, giant crawfish able to lift great claws out of the water and seize too venturesome enemies on the cliff tops.

War broke out with Skell, the god of the neighboring Klamath Marshes. Skell was killed and his heart used for a ball by Llao's monsters. But an eagle, one of Skell's servants, captured it in flight, and escaped with it; and Skell's body grew again around his living heart. Once more he was powerful, and once more he waged war against the God of the Lake.

Then Llao was captured; but he was not so fortunate. Upon the highest cliff his body was torn into fragments and cast into the lake, and eaten by his own monsters under the belief that it was Skell's body. But when Llao's head was thrown in, the monsters recognized it, and would not eat it.

Llao's head still lies in the lake, and white men call it Wizard Island. And the cliff where Llao was torn to pieces is named Llao Rock.

*Photograph by Fred H. Kiser, Portland, Oreg.*

Often the Trees Are as Gnarled and Knotted as the Cliffs They Grow on

*Photograph by U. S. Reclamation Service*

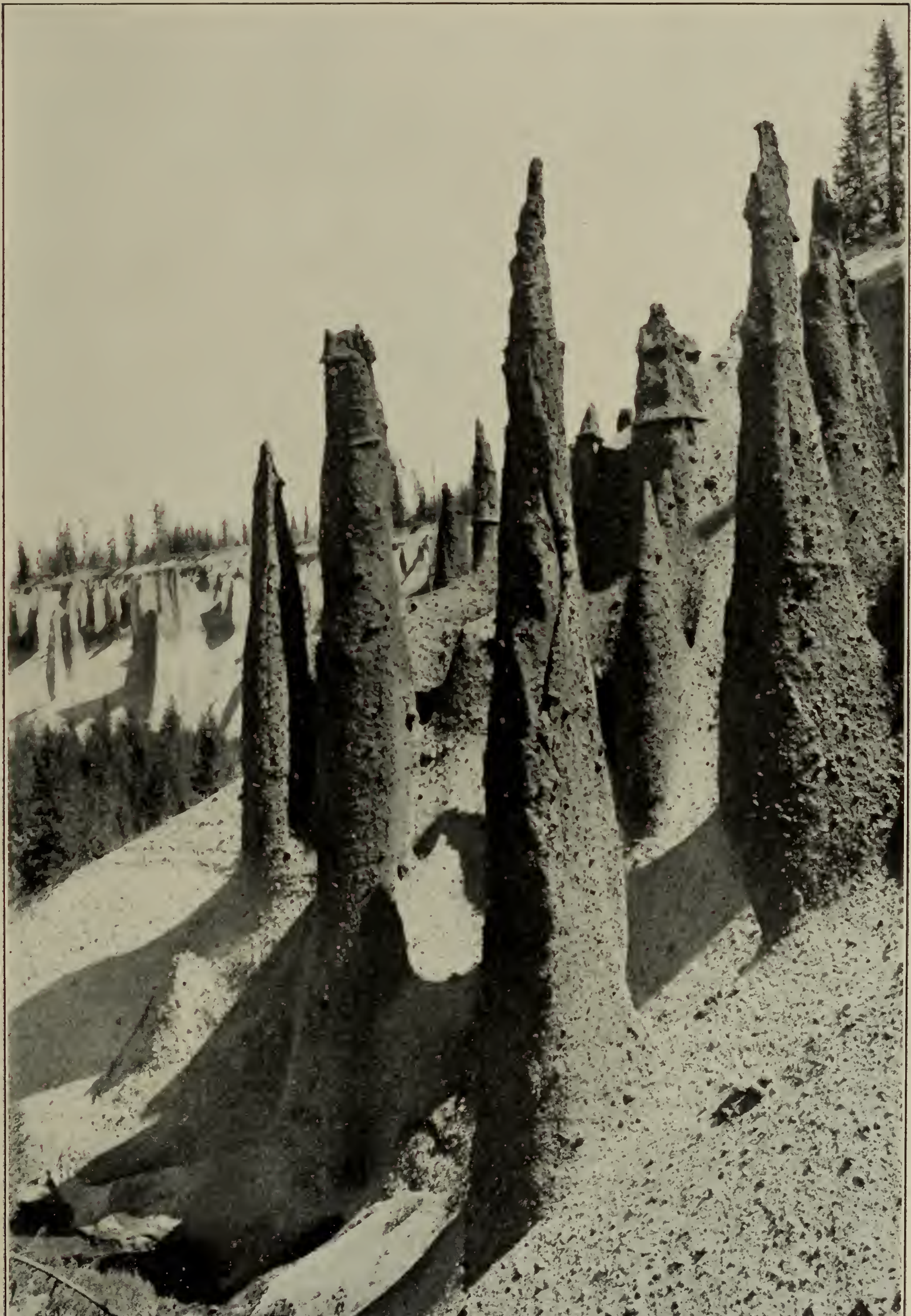
Looking Down into the Crater of Wizard Island

# VIEWED FROM THE RIM

SEVERAL days may profitably be spent upon the rim of the lake, which one may travel afoot, on horseback, or by automobile. The endless variety of lava formations and of color variation may be here studied to the best advantage.

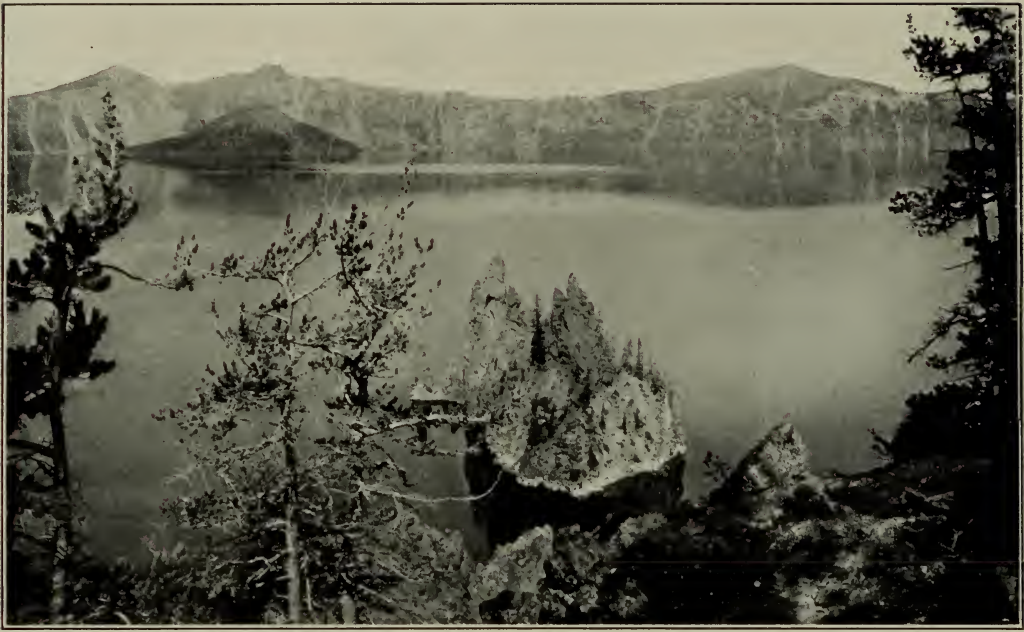
The temperature of the water has been the subject of much investigation. The average observations of years show that, whatever may be the surface variations, the temperature of the water below a depth of three hundred feet continues approximately thirty-nine degrees the year around. This disposes of the theory that the depths of the lake are affected by volcanic heat.

"Apart from its attractive scenic features," writes J. S. Diller of the United States Geological Survey, " Crater Lake affords one of the most interesting and instructive fields for the study of volcanic geology to be found anywhere in the world. Considered in all its aspects, it ranks with the Grand Canyon of the Colorado, the Yosemite Valley, and the Falls of Niagara, but with an individuality that is superlative."



*Copyright by Patterson*

Pinnacle Formations in Sand Creek Valley, Formed by Erosion



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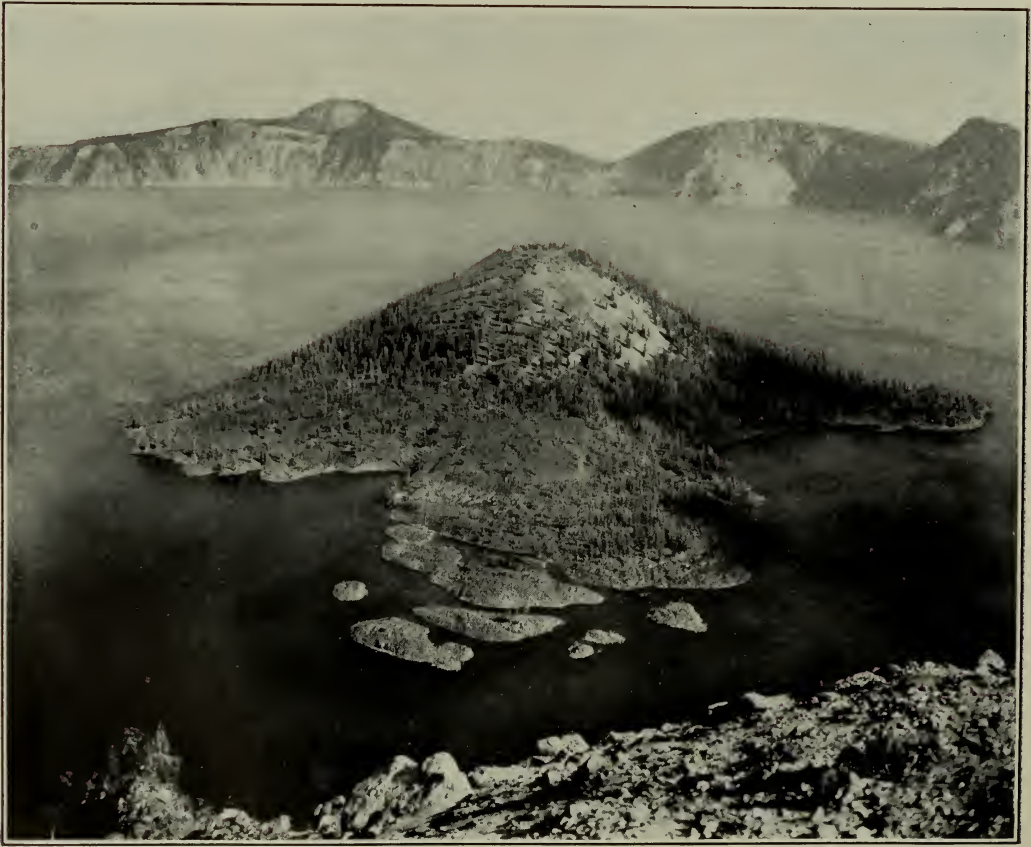
CLOSE-UP VIEW OF PHANTOM SHIP, WITH WIZARD ISLAND IN BACKGROUND



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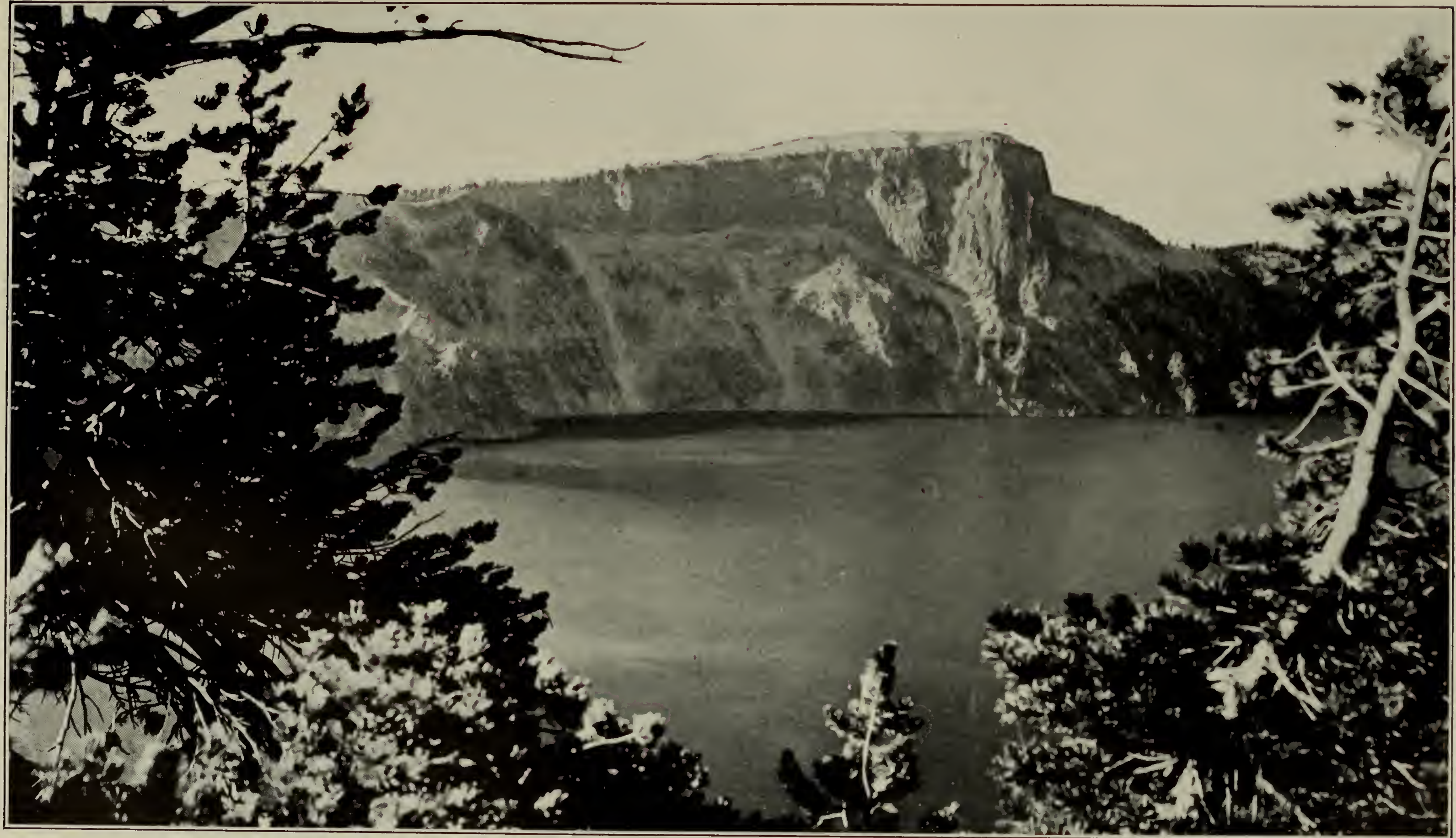
WIZARD ISLAND

A volcano built up within a volcano—a crater within a crater



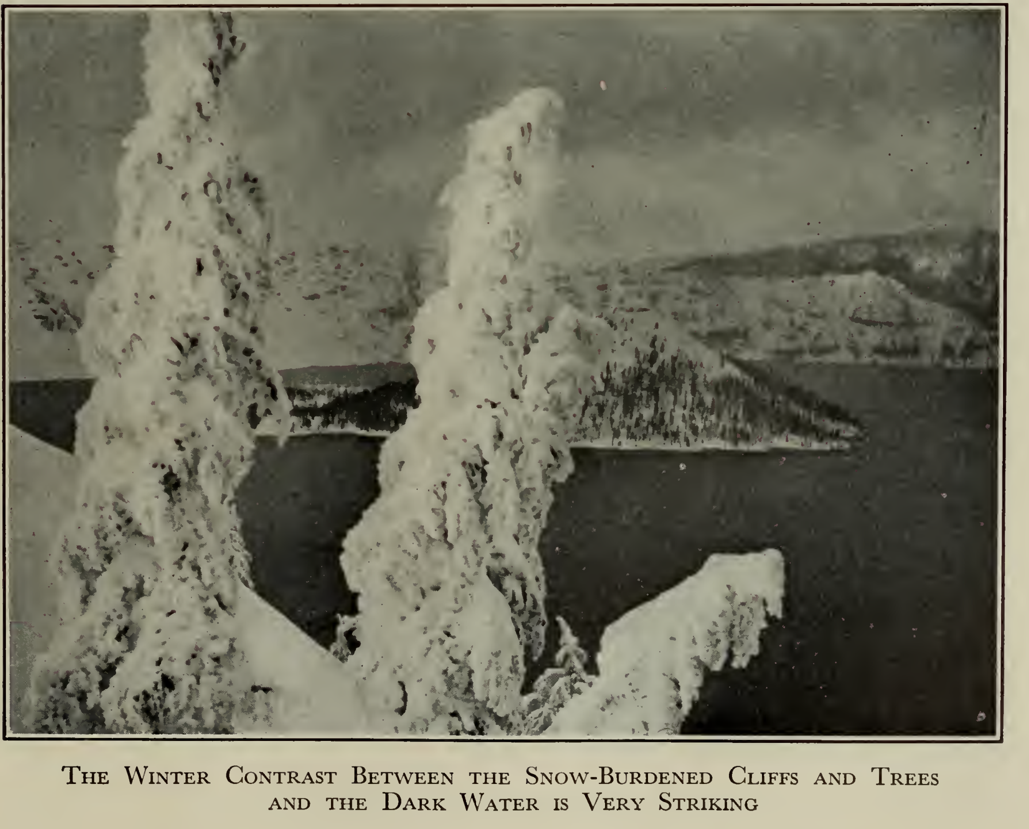
*Photograph by U. S. Reclamation Service*

View of Llao Rock, Which Strongly Suggests Crater Lake's Atmosphere of Mystery

*Copyright by Fred H. Kiser, Portland, Oreg.*

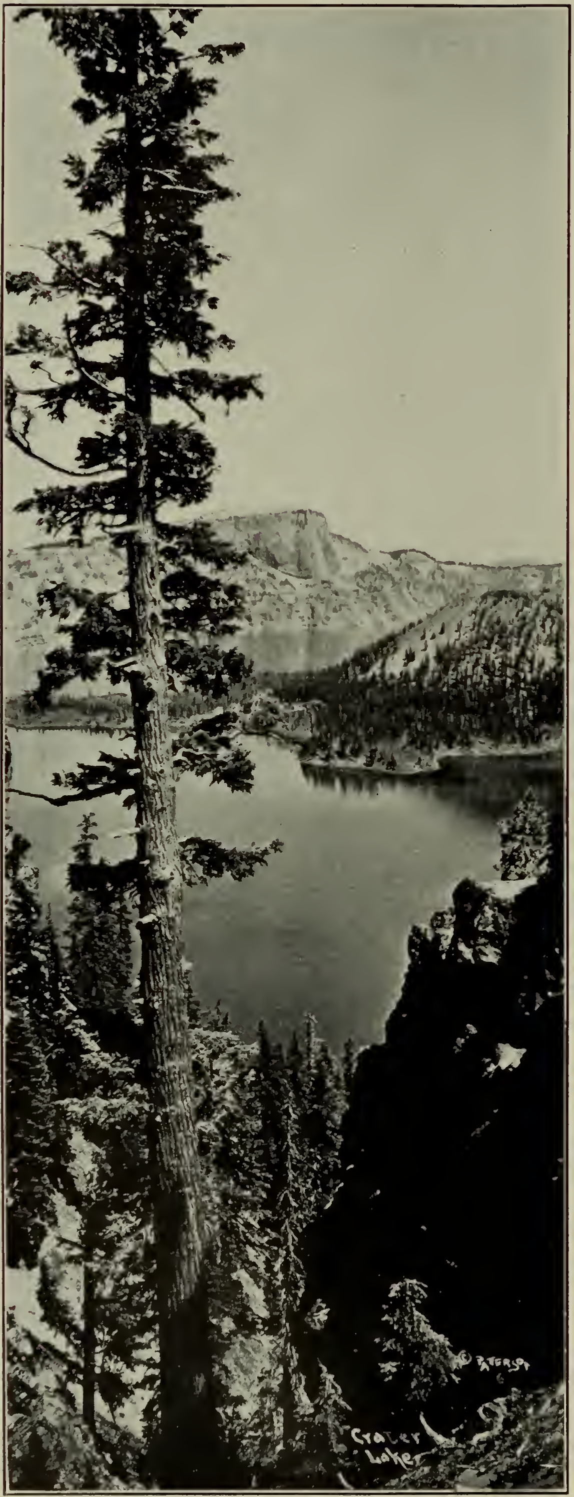
THE BEARS ARE THE MOST INTERESTING OF THE PARK'S WILD ANIMALS

The Moisture-Laden Winds from the Pacific Deposit Their Snow Burden upon Everything



The Winter Contrast Between the Snow-Burdened Cliffs and Trees and the Dark Water is Very Striking

# THE MINE OF BEAUTY



*Copyright by Patterson*

View from the Rim Road, Which Completely Encircles the Lake

CRATER LAKE is seen in its glory from a launch. One may float for days upon its surface without sating one's sense of delighted surprise; for all is new again with every change of light. The Phantom Ship, for instance, sometimes wholly disappears. Now it is there, and a few minutes after, with new slants of light, it is gone—a phantom indeed. So it is with many headlands and ghostlike palisades.

This lake was not discovered until 1853. Eleven Californians had undertaken once more the search for the famous, perhaps fabulous, Lost Cabin Mine. For many years parties had been searching the Cascades; again they had come into the Rogue River region. With all their secrecy their object became known, and a party of Oregonians was hastily organized to stalk them and share their find. The Californians discovered the pursuit and divided their party. The Oregonians did the same. It became a game of hide-and-seek. When provisions were nearly exhausted all the parties joined forces.

" Suddenly we came in sight of water," writes J. W. Hillman, then the leader of the combined party; "we were much surprised, as we did not expect to see any lakes and did not know but that we had come in sight of and close to Klamath Lake. Not until my

*Photograph by Fred H. Kiser, Portland, Oreg.*

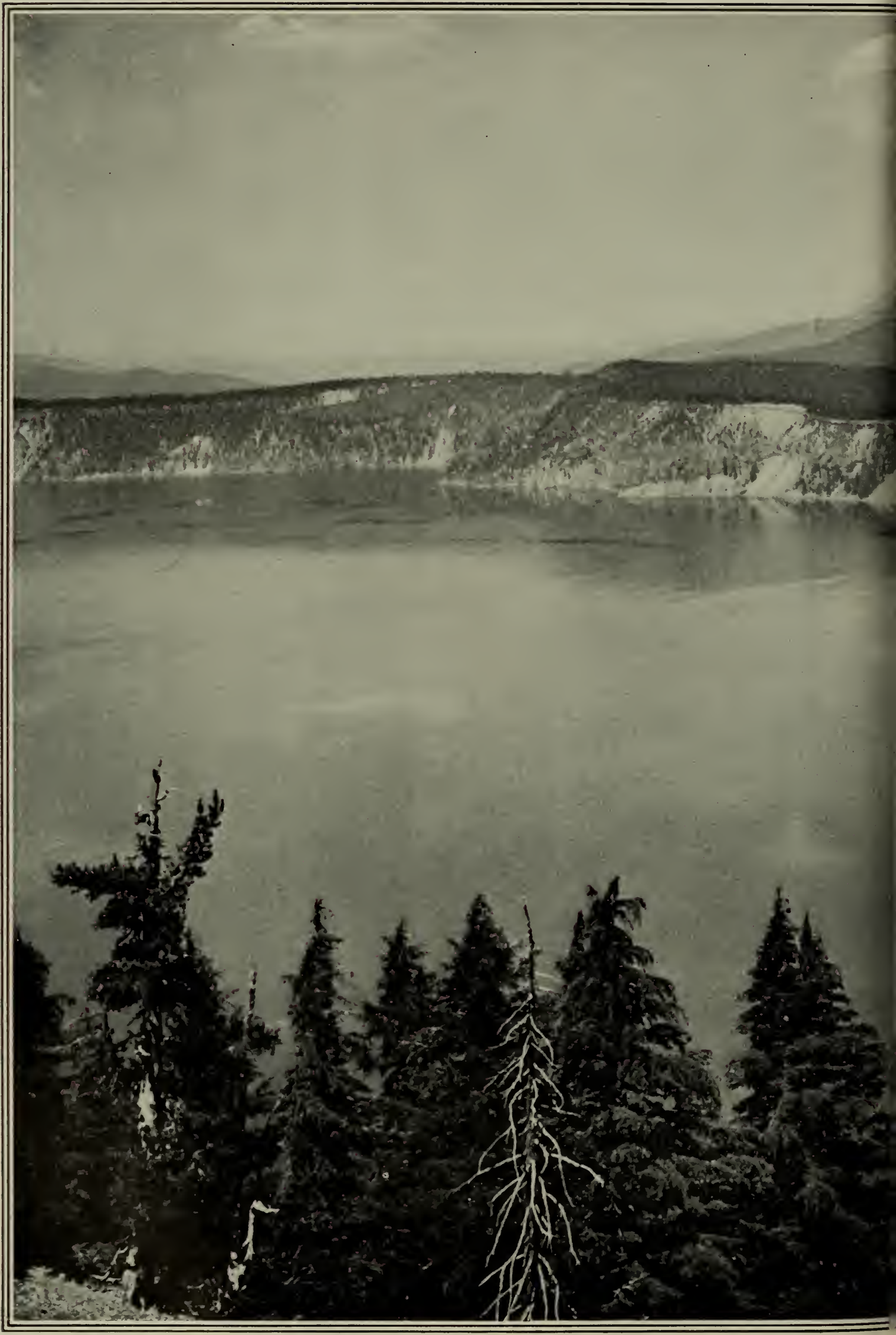
THE FAVORITE WAY TO SEE THE SCULPTURED CLIFFS IS FROM A MOTOR BOAT

mule stopped within a few feet of the rim of Crater Lake did I look down, and if I had been riding a blind mule I firmly believe I would have ridden over the edge to death."

It is interesting that the discoverers quarreled on the choice of a name, dividing between Mysterious Lake and Deep Blue Lake. The advocates of Deep Blue Lake won the vote, but in 1869 a visiting party from Jacksonville renamed it Crater Lake, and this, by natural right, became its title.

## HOTELS AND CAMPS

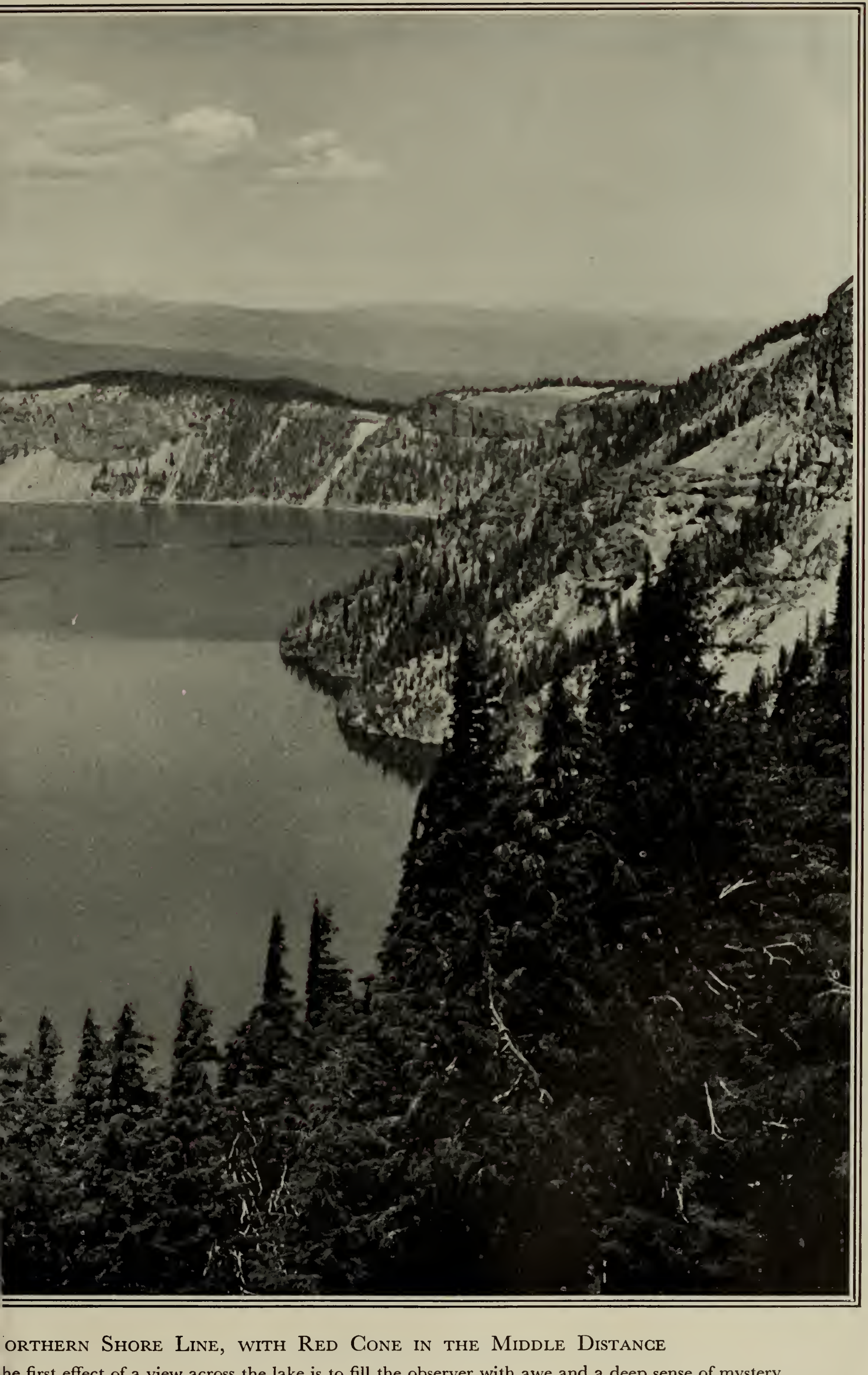
Crater Lake is accessible by both rail and highway. There are three excellent roads coming in the west, south, and east entrances. Comfortable hotel accommodations are available on the rim of the lake, and rental cabins, cafeteria, store, stage line, and boat service are also provided for the comfort of visitors. The Government maintains a free automobile camp ground for the visiting motorist.



*Photograph by U. S. Reclamation Service*

General View Across Crater Lake Near Sentinel Rock, Showing

These cliffs vary from a thousand to twelve hundred feet high, occasionally rising to two thousand feet.



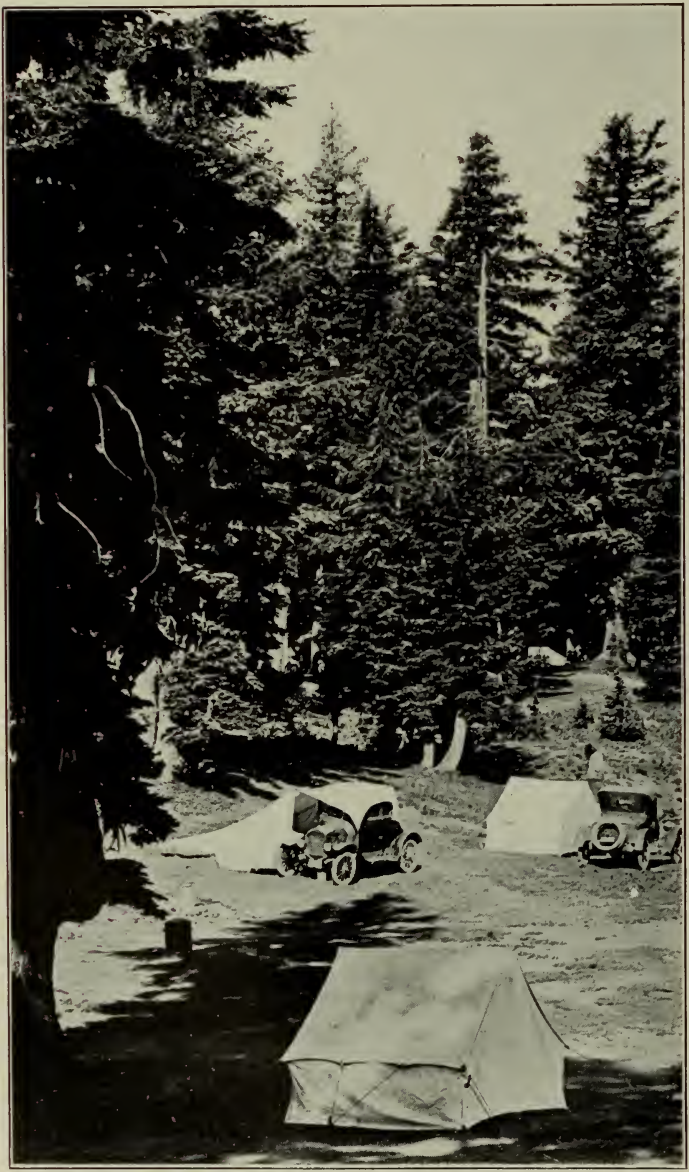
ORTHERN SHORE LINE, WITH RED CONE IN THE MIDDLE DISTANCE

he first effect of a view across the lake is to fill the observer with awe and a deep sense of mystery

# HARD-FIGHTING TROUT

THIS magnificent body of cold fresh water originally contained no fish of any kind. A small crustacean was found in large numbers in its waters, the suggestion, no doubt, upon which was founded the Indian legend of the gigantic crawfish which formed the bodyguard of the great god Llao.

In 1888 Will G. Steel brought trout fry from a ranch fifty miles away, but no fish were seen in the lake for more than a dozen years. Then a few were taken, one of which was fully thirty inches long.



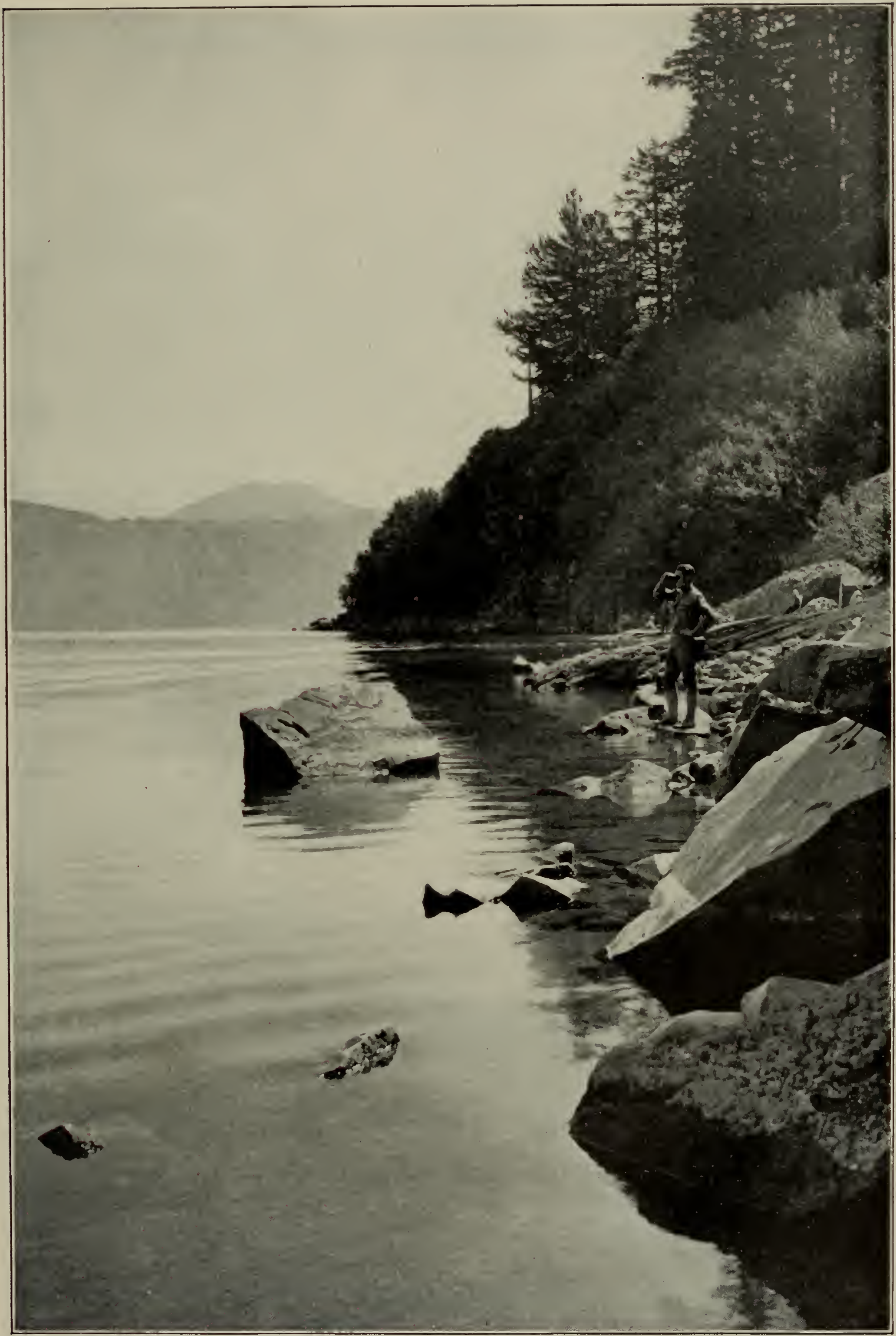
*Photograph by Patterson*

THERE ARE NINE FORESTED CAMP GROUNDS IN THE PARK

Since then trout have been taken in ever-increasing numbers, both by fly casting and trolling. Rainbow trout vary from one to ten pounds in weight.

The Rogue River, which has its source partially within the park, is one of the most famous trout streams in the world, being the home of the phenomenally game steelhead.

Anglers of experience in western fishing have testified that, pound for pound, the trout taken in the cold deep waters of Crater Lake are about the hardest-fighting trout of all. Some fish may be taken from the shore of Crater Lake, but the best fishing is to be had from boats.

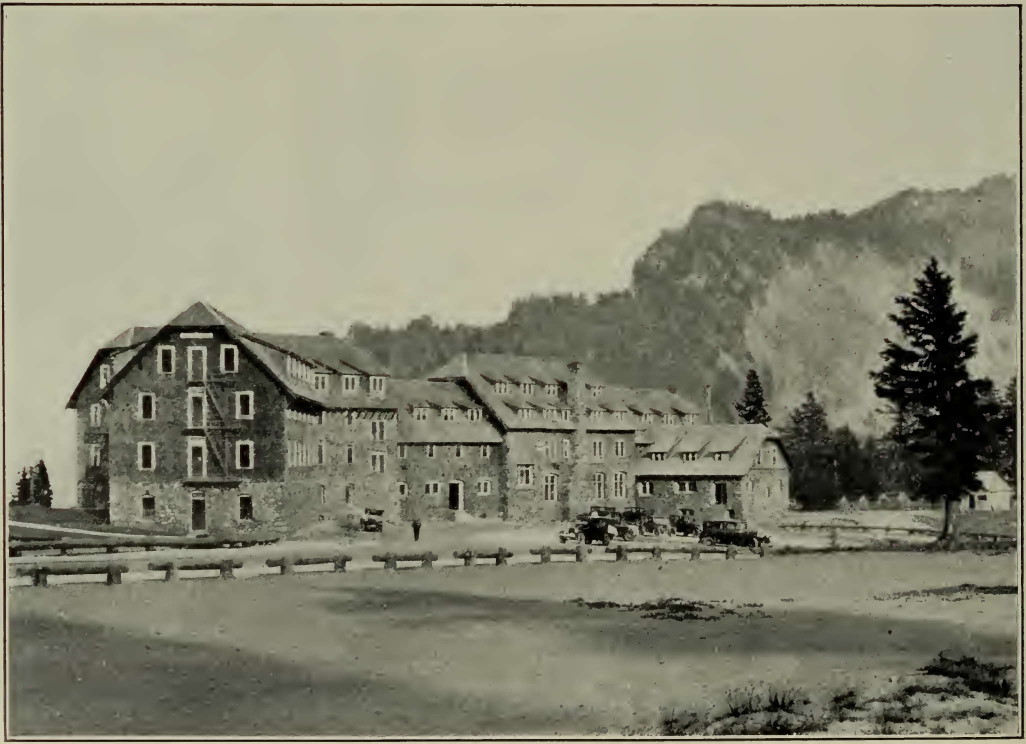


*Photograph by U. S. Reclamation Service*

AT THE FOOT OF THE TRAIL FROM CRATER LAKE LODGE

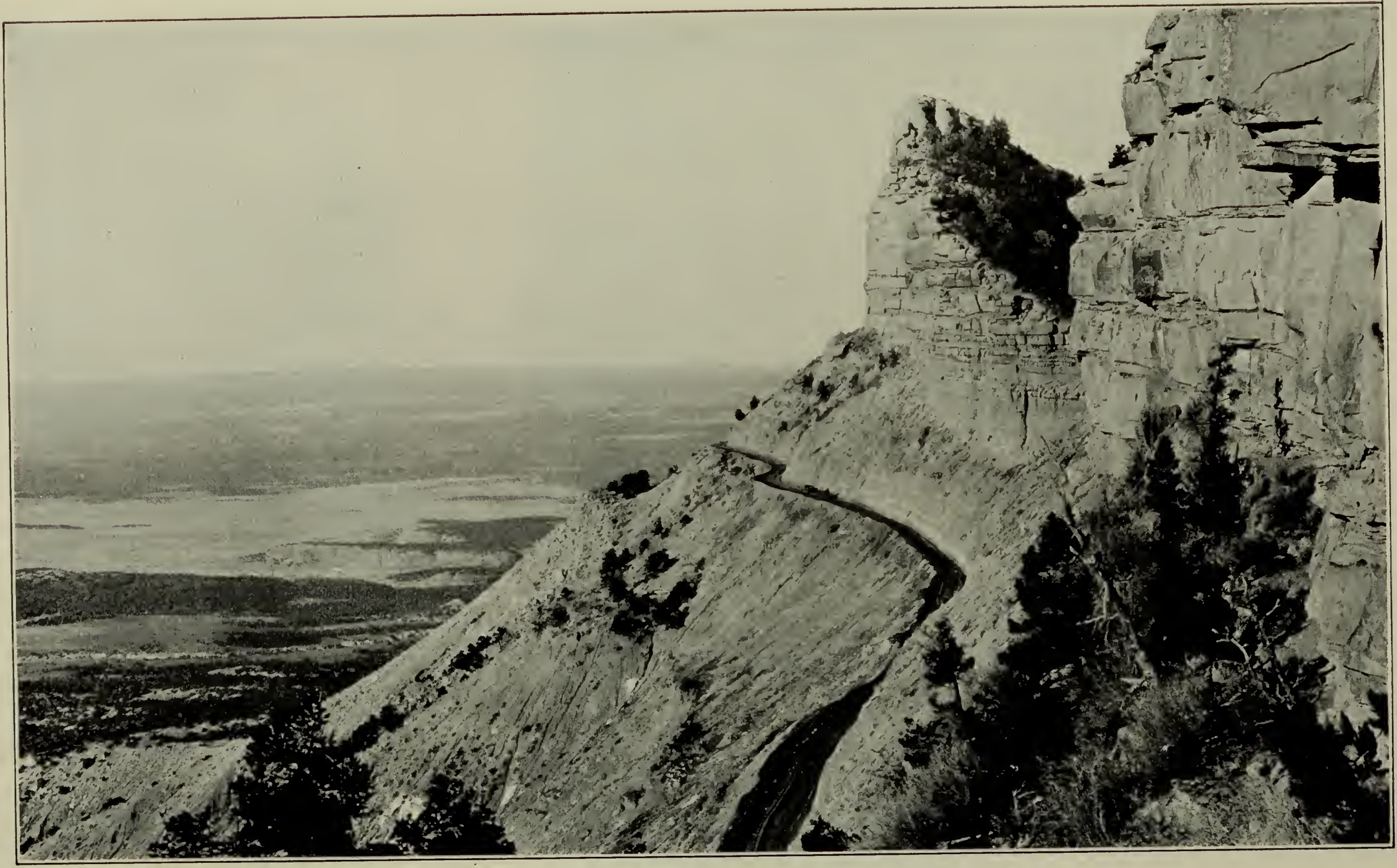
*Photograph by Fred H. Kiser, Portland, Oreg.*

Across the Lake from the Rim Road



Crater Lake Lodge on the Rim, 1,000 Feet Above the Lake

# THE
# MESA VERDE NATIONAL PARK



Knife-edge Section of North Entrance Road

This road skirts the north face of the Mesa Verde, 1,800 feet above the Montezuma Valley

*Photograph by F. C. Jeep*

YESTERDAY AND TO-DAY

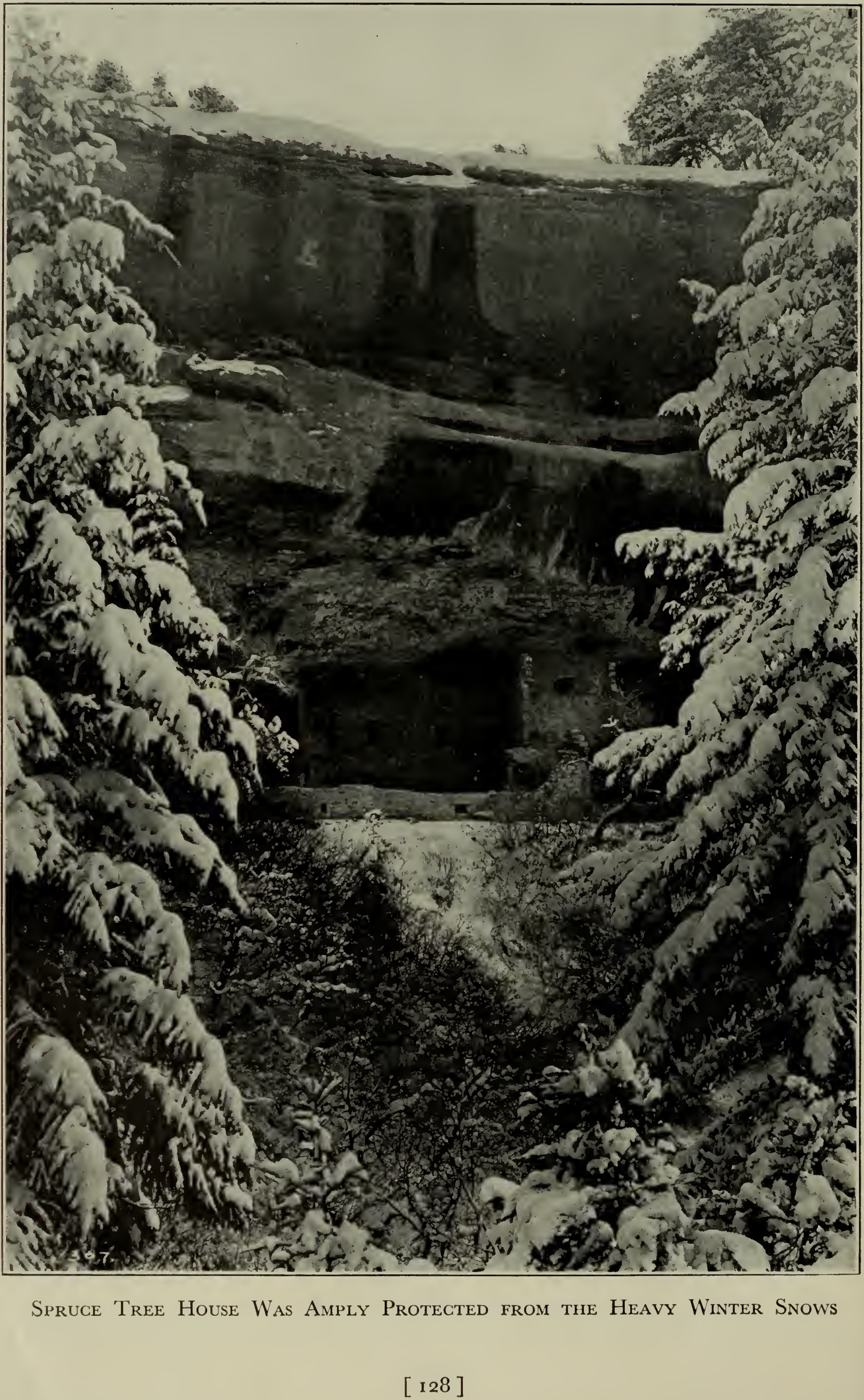
# COMMUNITIES *of the* PAST

ONE December day in 1888 Richard and Alfred Wetherall, searching for lost cattle on the Mesa Verde southwest of Mancos, Colorado, pushed through dense growths on the edge of a deep canyon and shouted aloud in astonishment. Across the canyon, tucked into a shelf under the overhanging edge of the opposite brink, were the walls and towers of what seemed to them a palace. They named it Cliff Palace.

Forgetting the cattle in their excitement, they searched the mesa in all directions. Near by, under the overhanging edge of another canyon, they found a similar group, no less majestic, which they named Spruce Tree House because a large spruce grew out of the ruins.

Thus were discovered the most elaborate and best-preserved prehistoric cliff-dweller ruins in America, if not in the world.

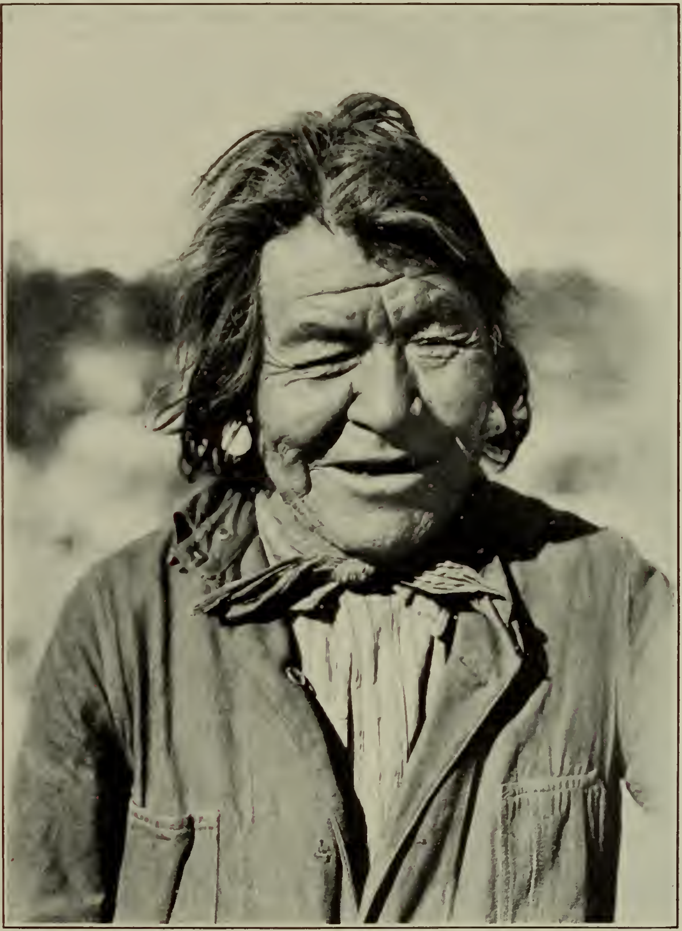
A careful search of the entire Mesa Verde in the years following has resulted in many other finds of interest and importance. In 1906 Congress set aside the region as a national park. Even yet its treasures of antiquity are not all known. A remarkable temple to the sun was unearthed in 1915.



Spruce Tree House Was Amply Protected from the Heavy Winter Snows

# THE STORY OF THE MESAS

THOSE who have traveled through our Southwestern States have seen from the car windows innumerable mesas or isolated plateaus rising abruptly for hundreds of feet from the bare and often arid plains. The word "mesa" is Spanish for table. Once the level of these mesa tops was the level of all of this vast southwestern country, but the rains and floods of centuries have washed away the softer earths down to its present level, leaving standing only the rocky spots or those so covered with surface rocks that the rains could not reach the softer strata underneath.



Navajo Indians Constitute the Bulk of the Park's Laboring Forces. At the Evening Camp Fire They Give Their Yebechai Dance

The Mesa Verde (called verde or green because of the heavy forest cover) is one of the great mesas, being approximately fifteen miles long and eight miles wide, and perhaps the most widely known in the Southwest. The surface of this great tableland, rising abruptly one thousand to two thousand five hundred feet above the surrounding valleys, is gashed by a great series of precipitous canyons, and in the great caves in the sheer canyon walls the ruins of the ancient cliff dwellers are found. The most important ruins are located in Rock, Long, Wickiup, Navajo, Spruce, Soda, Moccasin, and tributary canyons.

# IN THE CLIFF DWELLINGS

LIFE must have been difficult in this dry country when the Mesa Verde communities flourished in the sides of these sandstone cliffs. Game was scarce and hunting arduous. The Mancos River yielded a few fish. The earth contributed berries or nuts. Water was rare and found only in sequestered places near the heads of the canyons. Nevertheless, the inhabitants cultivated their farms and raised their corn, which they ground on flat stones called metates. They baked their bread on flat stone griddles. They boiled their meat in well-made vessels some of which were artistically decorated.

Their life was difficult, but confidently did they believe that they were dependent upon the gods to make the rain fall and the corn grow. They were a religious people who worshipped the sun as the father of all and the earth as the mother who brought them all their material blessings. They possessed no written language and could only record their thoughts by a few symbols which they painted on their earthenware jars or scratched on the rocks.

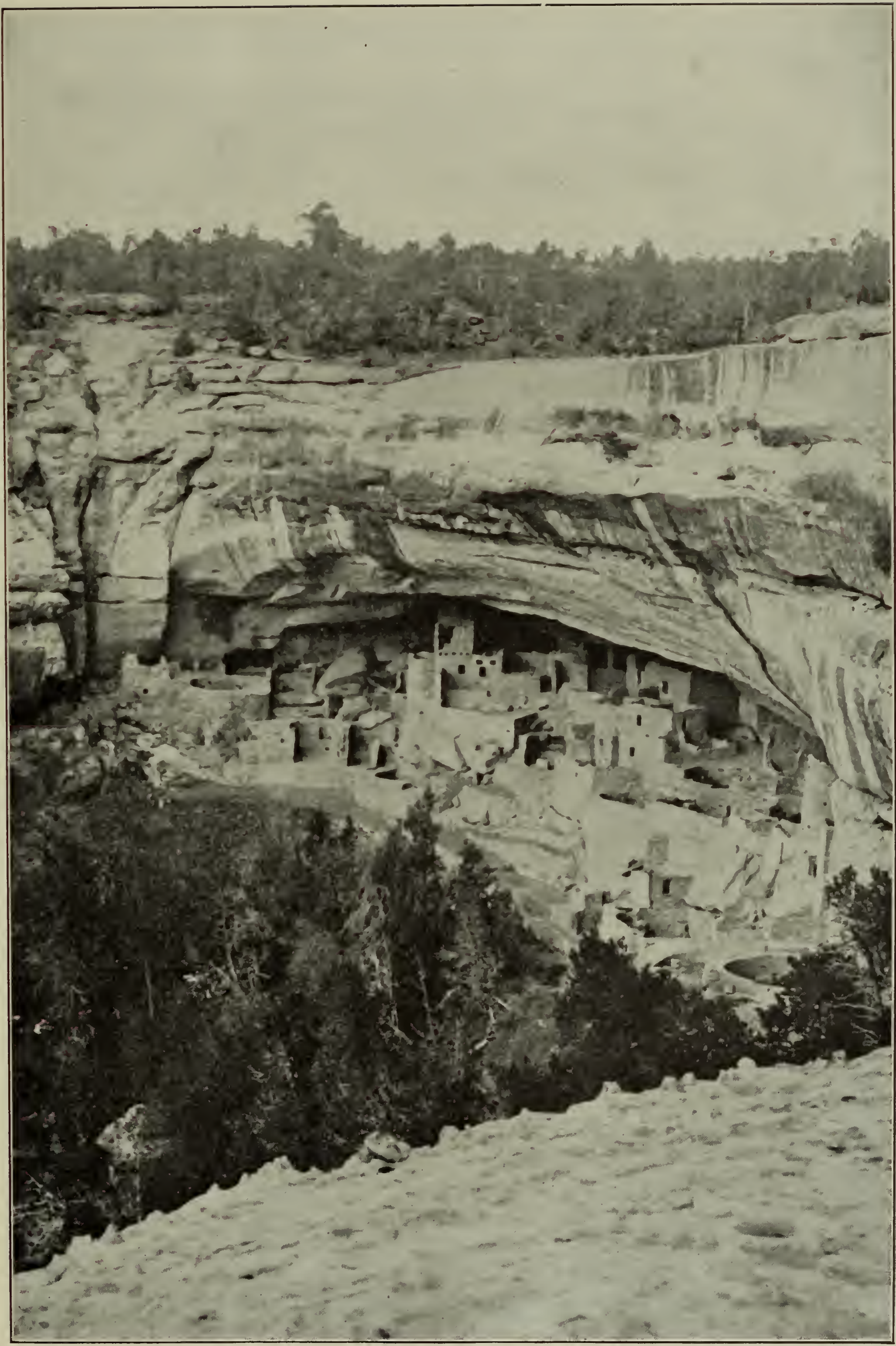
As their sense of beauty was keen, their art, though primitive, was true; rarely realistic, generally symbolic. Their decoration of cotton fabrics and ceramic work might be called beautiful, even when judged by the highly developed taste of to-day. They fashioned axes, spear points, and rude tools of stone; they wove sandals and made attractive basketry.

They were not content with rude buildings and had long outgrown the caves that satisfied less civilized Indians farther north and south of them.

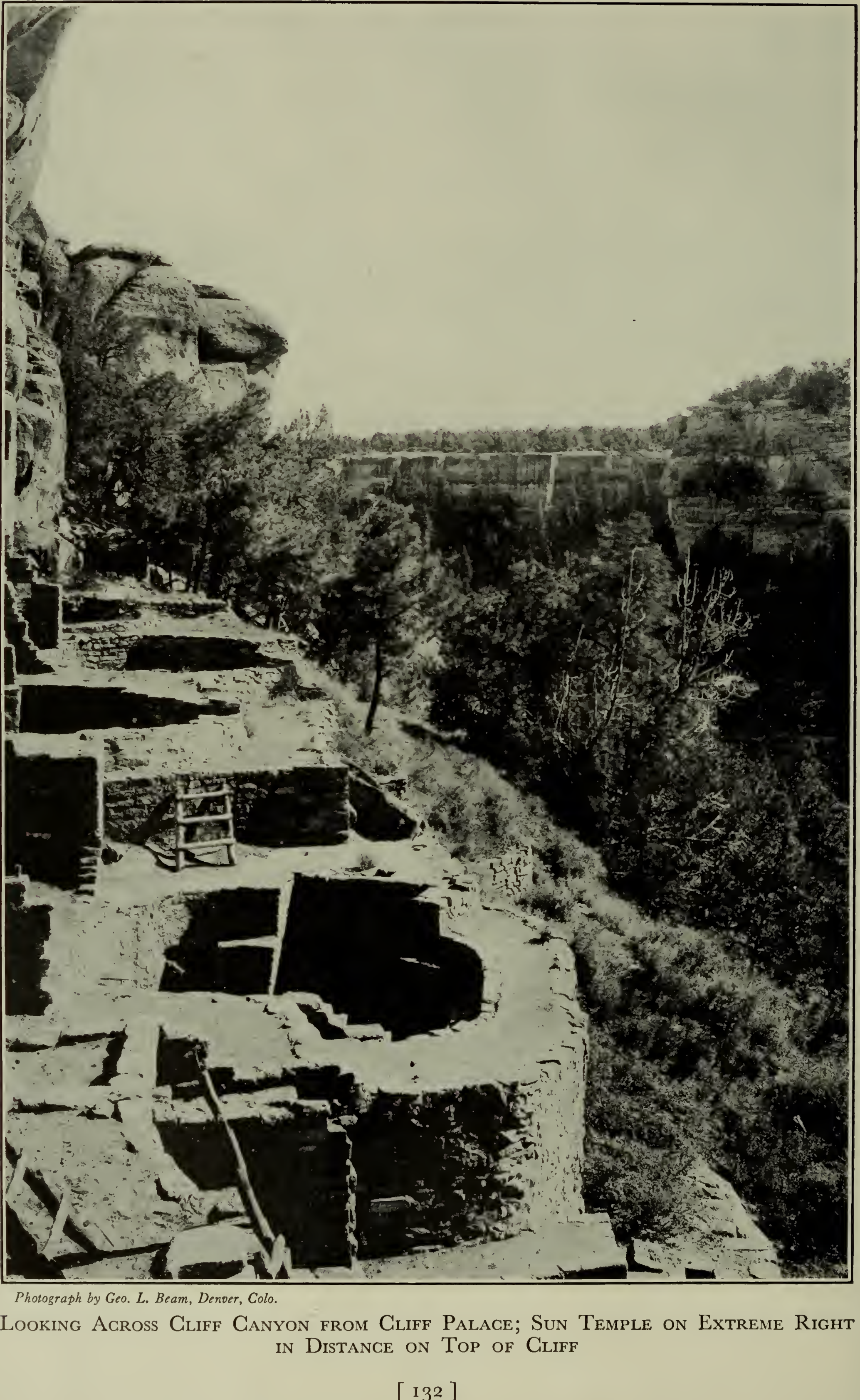
The photographs of Cliff Palace on the following three pages will show not only the protection afforded by the overhanging cliffs but the general scheme of community living.

The population was composed of a series of units, possibly clans, each of which had its own social organization more or less distinct from the others. Each had ceremonial rooms, called kivas. Each also had living rooms and storerooms. There were twenty-three social units or clans in Cliff Palace.

The kivas were the rooms where the men spent most of the time devoted to ceremonies, councils, and other gatherings. The religious fraternities were limited to the men of a clan.

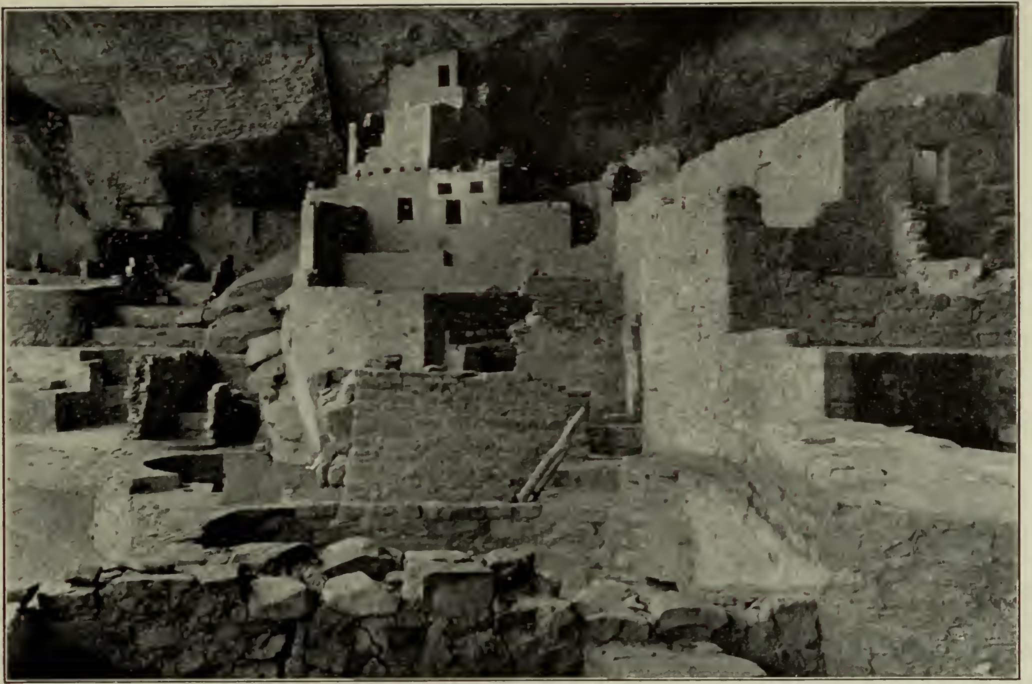


Cliff Palace with its Two Hundred and Two Rooms and Twenty-Three Kivas Is the Largest and Best Preserved of the Known Cliff Dwellings



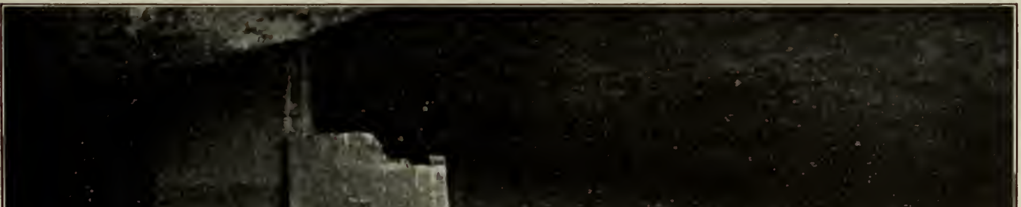
*Photograph by Geo. L. Beam, Denver, Colo.*

Looking Across Cliff Canyon from Cliff Palace; Sun Temple on Extreme Right in Distance on Top of Cliff



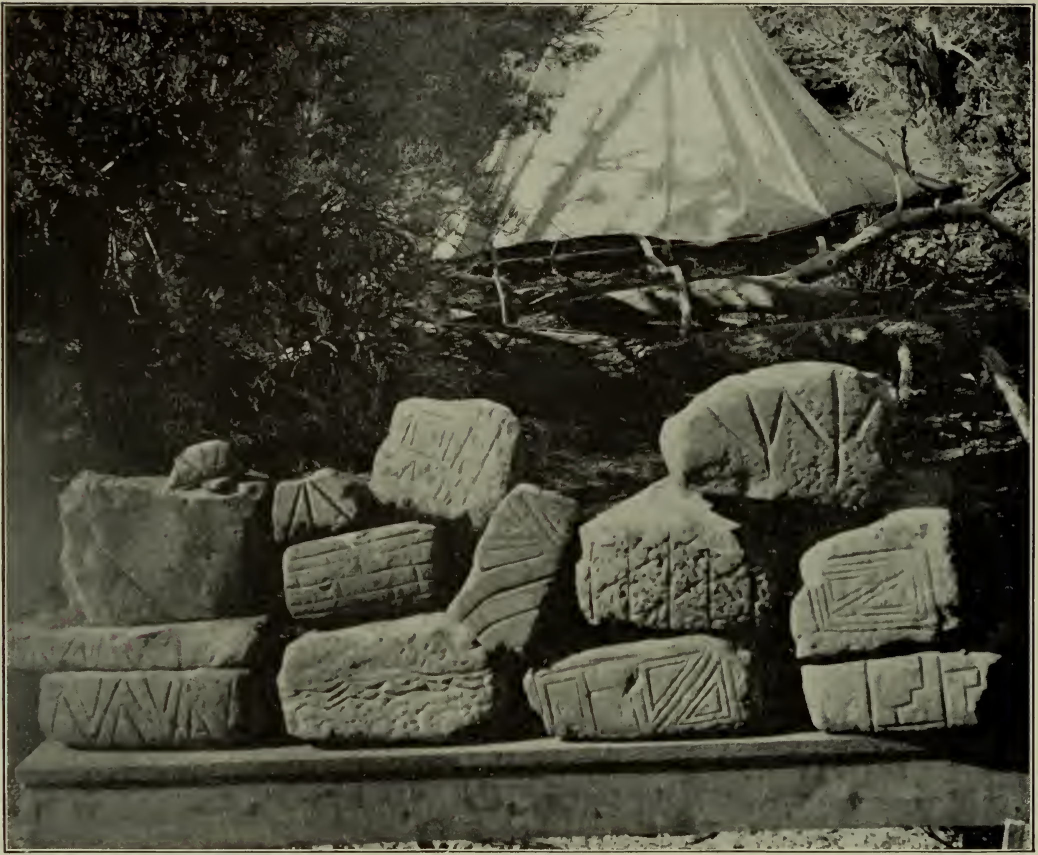
*Photograph by Arthur Chapman*

THE SPEAKER CHIEF'S HOUSE OCCUPIES A COMMANDING POSITION IN CLIFF PALACE



*Photograph by Arthur Chapman*

NORTHEAST QUARTER OF CLIFF PALACE



*Photograph by T. G. Lemmon*

STONES FROM SUN TEMPLE COVERED WITH GEOMETRICAL AND EMBLEMATICAL DESIGNS

# THE MESA'S LITTLE PEOPLE

MANY Indians to-day shun the ruins of the Mesa Verde. They believe them inhabited by spirits whom they call the Little People. It is vain to tell them that the Little People were probably their own ancestors; they refuse to believe it.

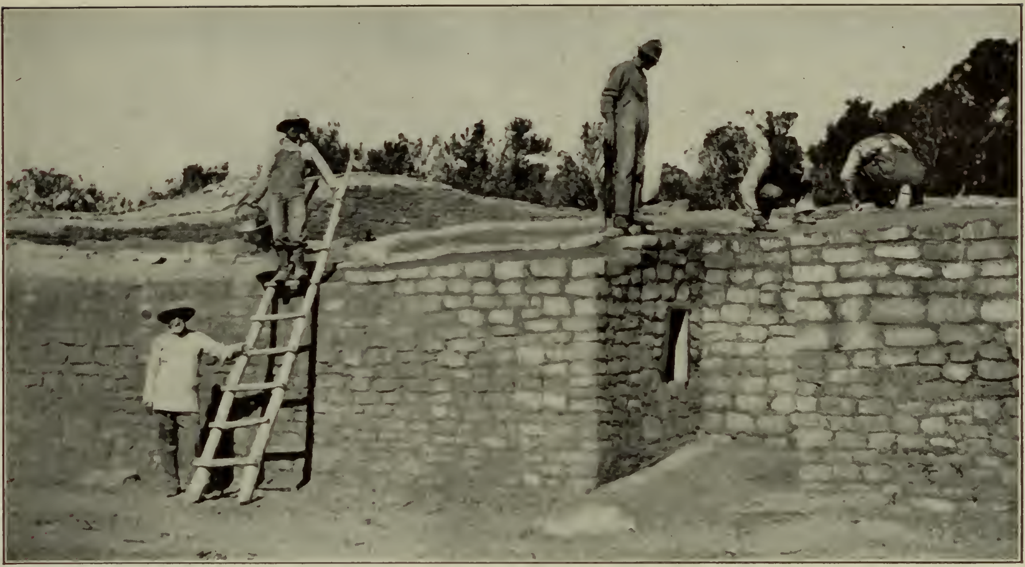
When the national park telephone line was building in 1915 the Indians were greatly excited. Coming to the Superintendent's office, they shook their heads ominously.

The poles wouldn't stand up, they declared. Why? Because the Little People wouldn't like such an uncanny thing as a telephone.

But poles were standing, the Superintendent pointed out. All right, the Indians replied, but wait. The wires wouldn't talk. Little People wouldn't like it.

The poles were finally all in and the wires strung. What was more, the wires actually did talk and are still talking.

Never mind, say the Indians, with unshaken faith. Never mind. Wait. That's all. It will come. The Little People may stand it—for a while. But wait. The Superintendent is still waiting.



*Photograph by F. C. Jeep*

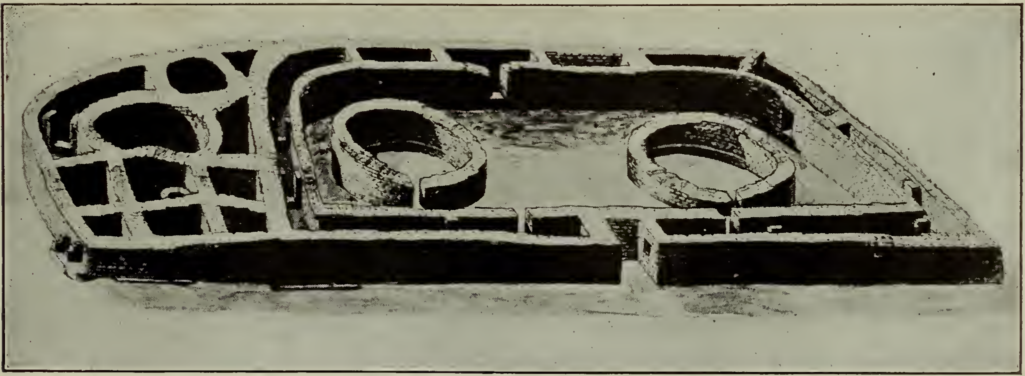
Constructive Detail of South Wall, Sun Temple

# DISCOVERY OF SUN TEMPLE

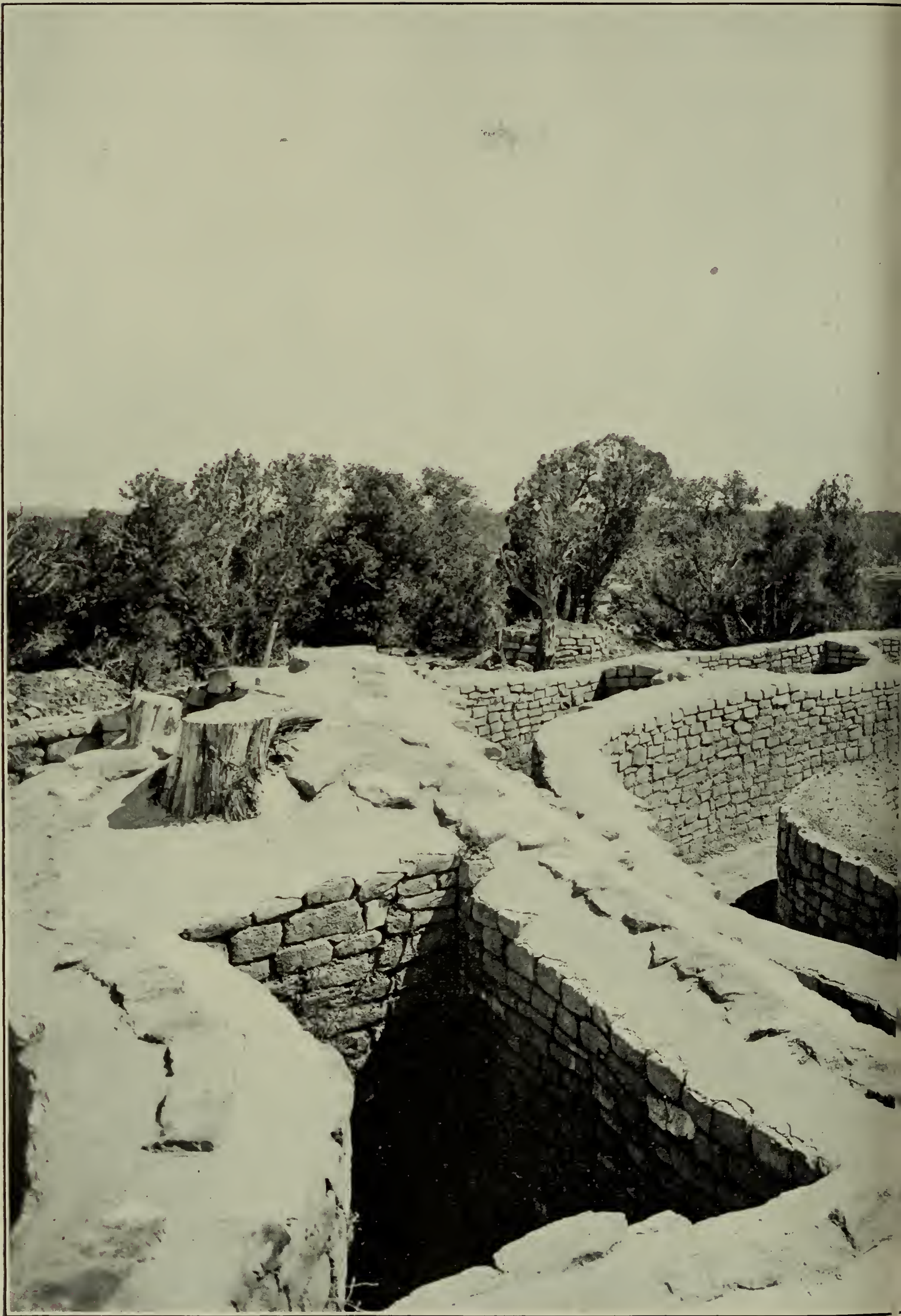
UNTIL the summer of 1915 no structures had been discovered in the Mesa Verde except those of the cliff-dwelling type. Then the Department of the Interior explored a mound on the top of the mesa opposite Cliff Palace and unearthed Sun Temple. Dr. J. Walter Fewkes who conducted the exploration, believes that this was built about 1300 A. D. and marks the final stage in Mesa Verde development.

Sun Temple was a most important discovery. It marked a long advance toward civilization. It occupied a commanding position convenient to many large inhabited cliff dwellings. Its masonry showed growth in the art of construction. Its walls were embellished by geometrical figures carved in rock.

New types of ruins antedating by centuries those of the Cliff Dwellers have been found more recently. The new park museum contains exhibits of the artifacts of all these cultural types.

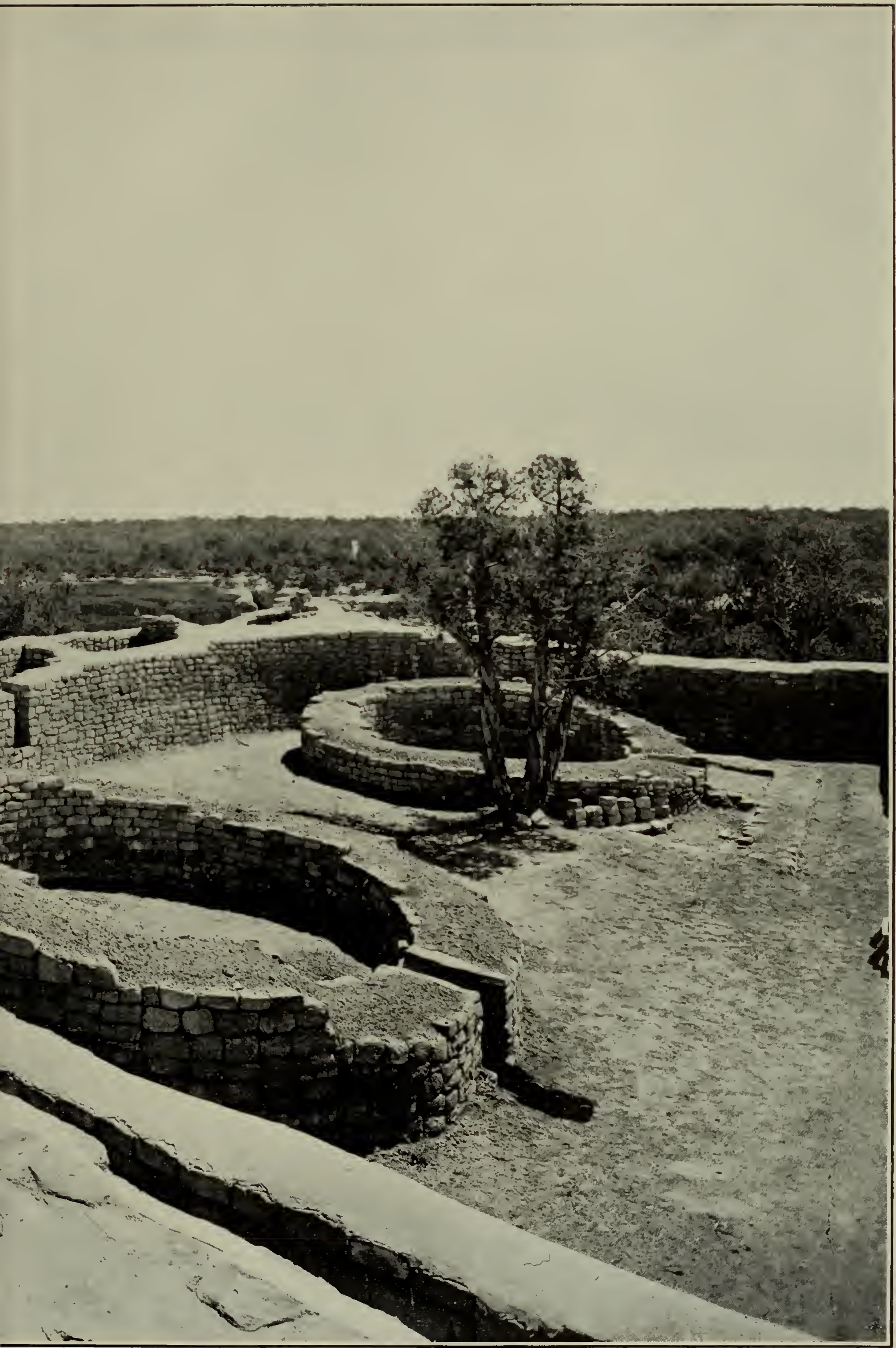


Drawing Showing Constructive Detail of Sun Temple

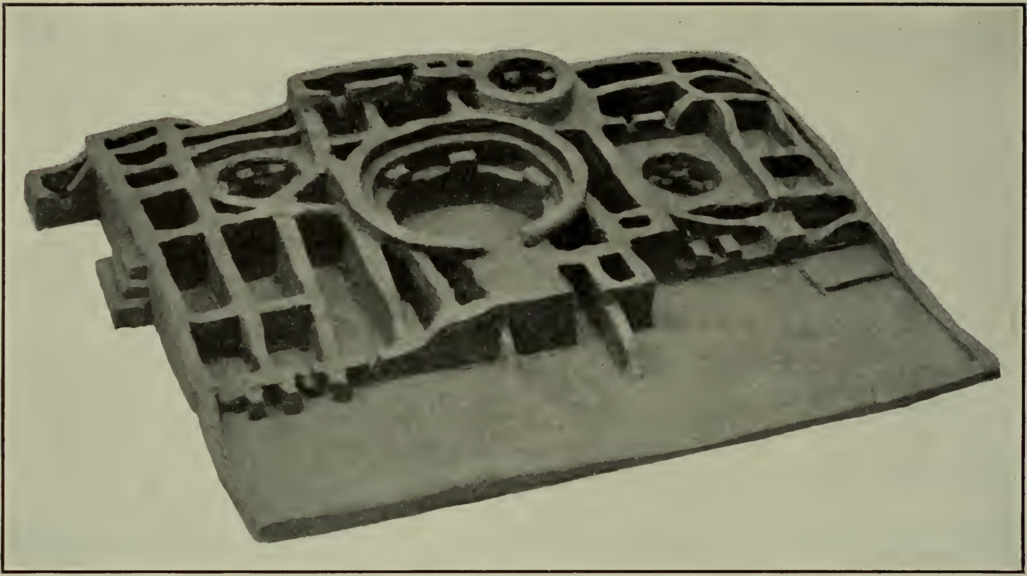


*Photograph by Geo. L. Beam, Denver, Colo.*

THE SUN TEMPLE, LOOKING NORTHEAST. AT LEFT THE STUMP OF CEDAR



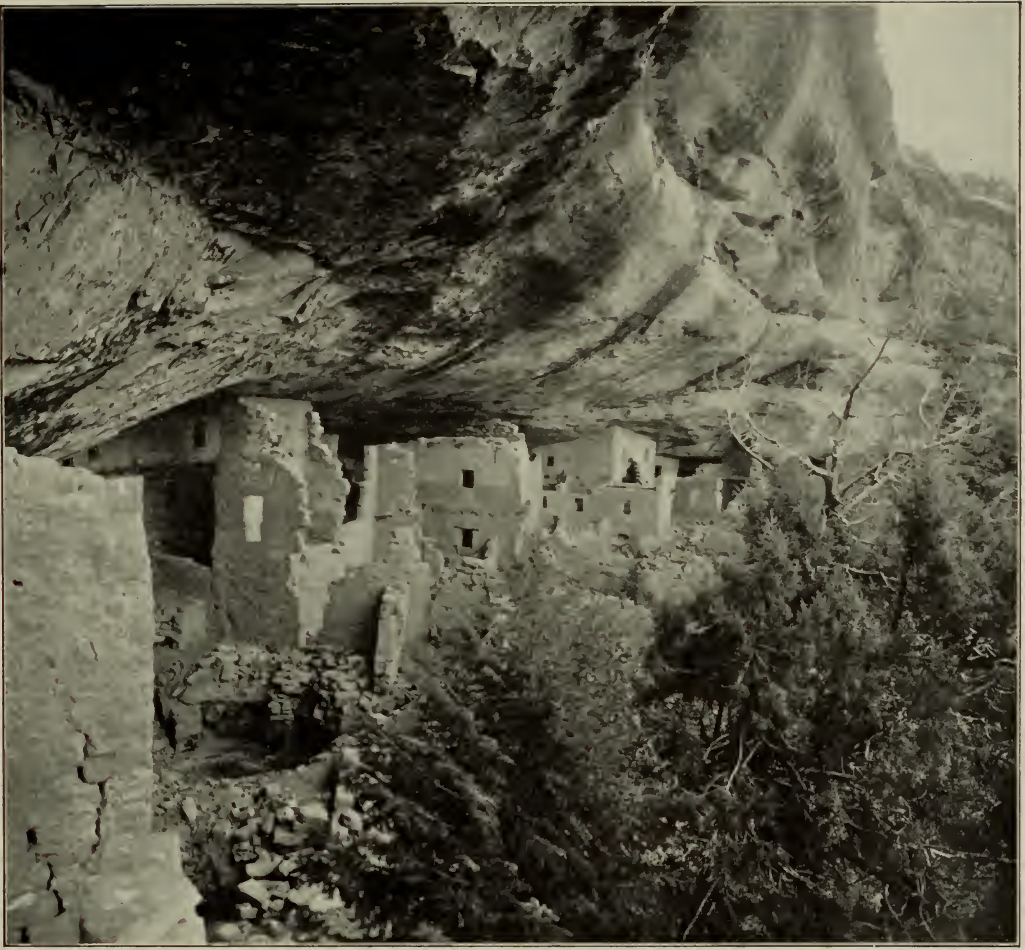
Tree with 360 Annular Rings Which Was Cut Down During Excavation



Model of Far View House

*Photograph by George L. Beam*

Excavating Far View House on the Top of the Mesa



Spruce Tree House Hides Under a Huge Overhanging Cliff

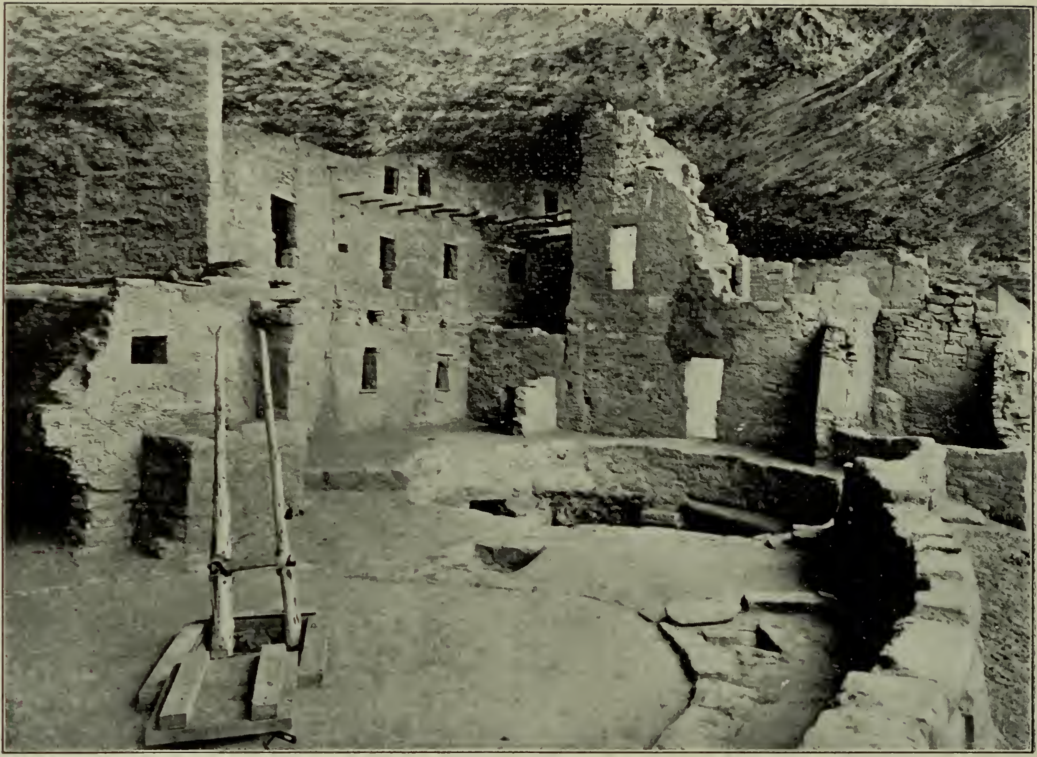
# THE PRINCIPAL DWELLINGS

CLIFF PALACE is the most celebrated of the Mesa Verde ruins because it is the largest and most prominent. Others are no less interesting and important. Spruce Tree House is next in size; Balcony House and Square Tower House are equally well preserved. There are hundreds of others, some of which have yet to be thoroughly explored; probably some are still undiscovered.

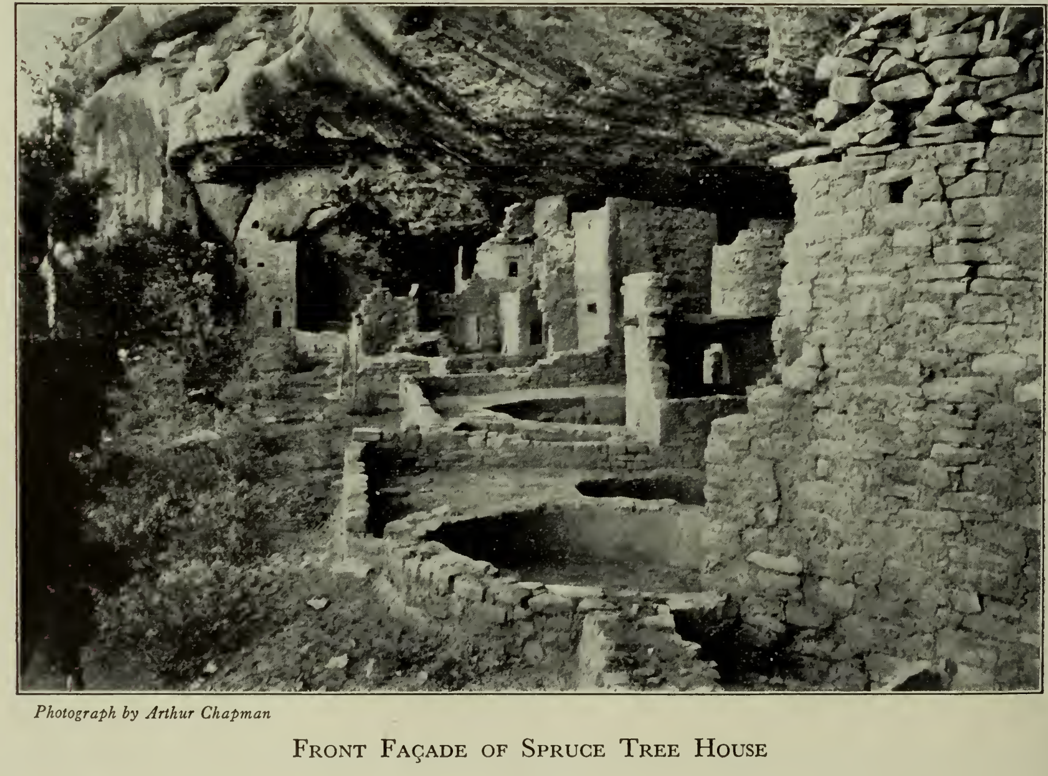
Cliff Palace is three hundred feet long; Spruce Tree House two hundred and sixteen. Cliff Palace contained over two hundred rooms; Spruce Tree House a hundred and fourteen. Spruce Tree House originally had three stories. Its population was probably three hundred and fifty.

The Round Tower in Cliff Palace is an object of unusual interest.

The kivas or ceremonial rooms were usually round, subterranean rooms of more or less uniform size, construction, and arrangement. Except in a few notable cases they were entered by means of a ladder through the roof or hatchway.

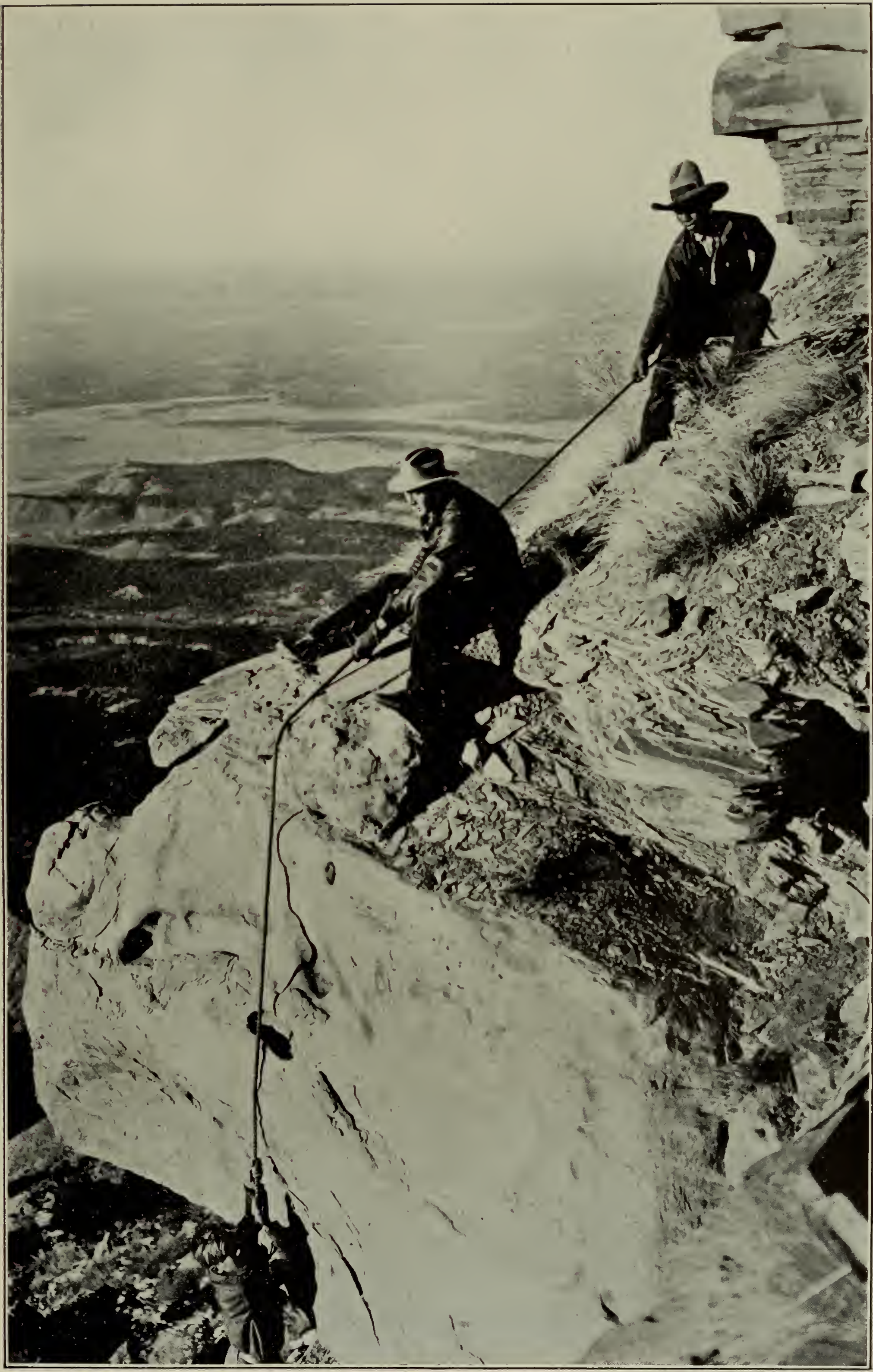


North Court of Spruce Tree House



*Photograph by Arthur Chapman*

Front Façade of Spruce Tree House



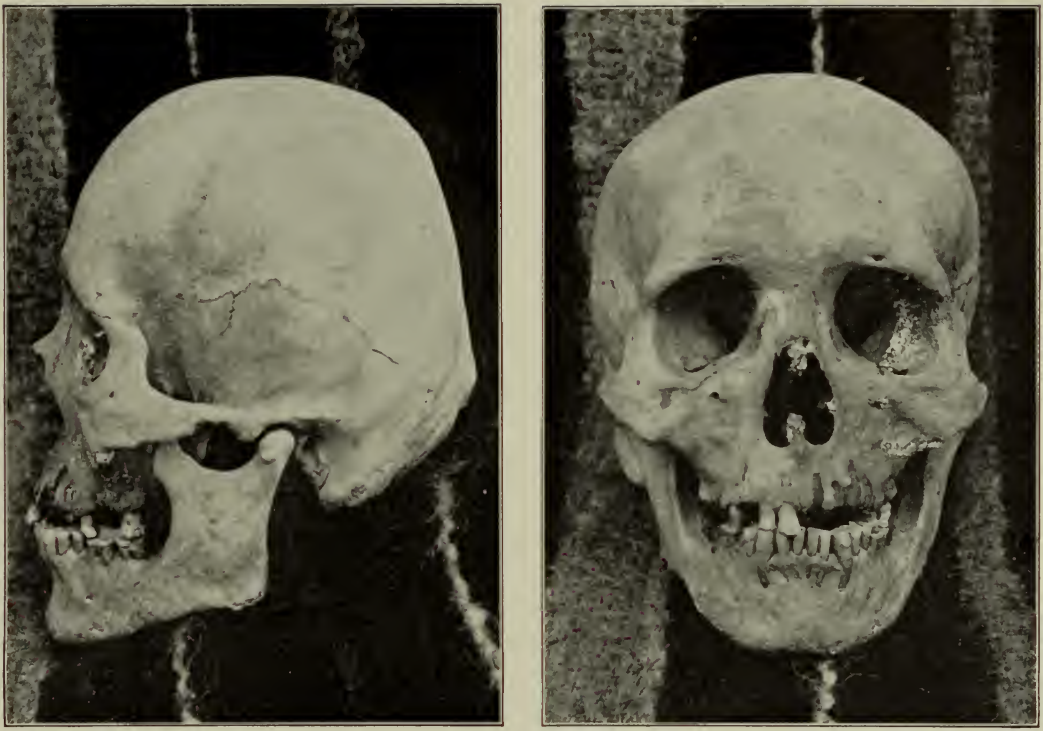
Descending the Knife-edge Cliff to Photograph a Golden Eagle's Nest

*Photograph by John P. Dods*

MOST OF MESA VERDE'S TRAVEL IS BY MOTOR

*Photograph by John P. Dods*

NAVAJO WEAVERS COME TO THE PARK TO TRADE



*Photographs by J. L. Nusbaum*

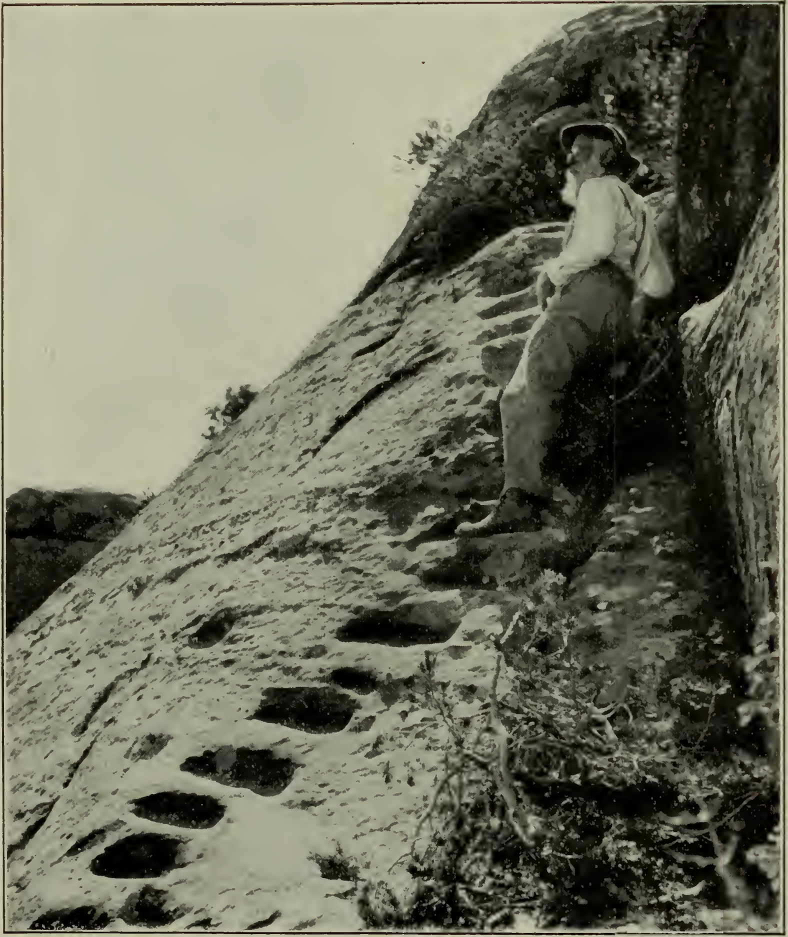
Typical Skulls of Prehistoric Man Found in the Mesa Verde

The use of an unpadded cradle-board in childhood flattened the rear of the skull, giving unusual breadth to the face. Nordenskiöld concludes that the race was fairly robust, with heavy skeletons and strong muscular processes. The facial bones are well developed and lower jaw heavy

# THE NATURAL SCENERY

MESA VERDE NATIONAL PARK is in the extreme southwestern corner of Colorado and is reached from the rail points of Mancos, Colorado, and Gallup, New Mexico, by motor stage or private automobile. The finest of the scenic mountain highways of Colorado invite the motorist visiting this area, and the highway from Gallup across the Navajo Indian Reservation is excellent.

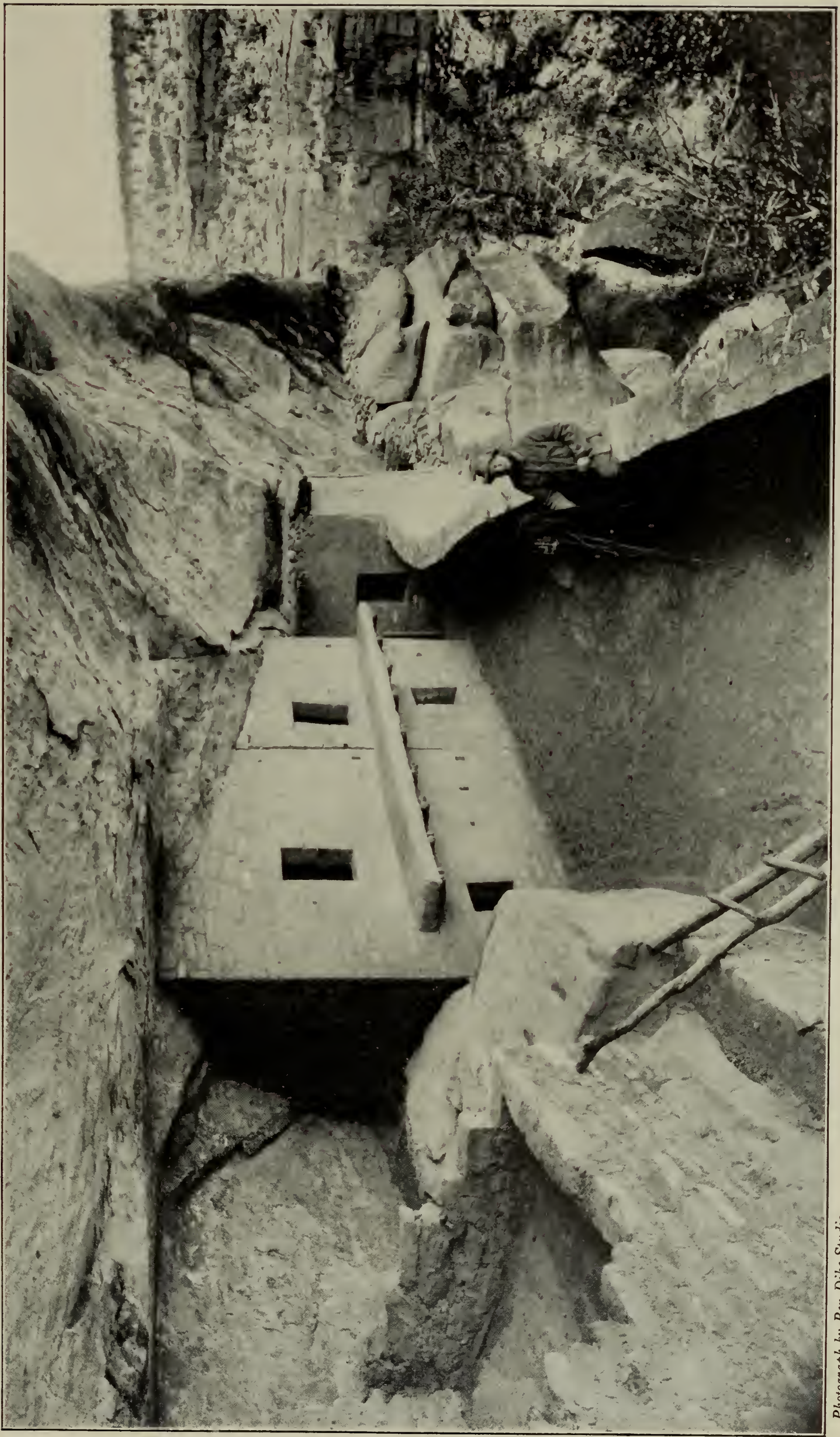
Apart from the ruins the country is one of spectacular beauty and weird charm. As one ascends the mesa tremendous expanses of the diversified terrain of the adjacent corners of the States of Colorado, Utah, New Mexico, and Arizona come into view—the snow covered La Platas, San Juans, and Ricos, of Colorado; the La Sals and Blues of Utah; the Carrizos of Arizona, and the Lukachukais, Tunichas, and Chuskas of the Navajo Reservation of New Mexico, with the great monolith of Shiprock, fifty miles distant, basking in the foreground, like a windjammer under full sail.



Photograph by F. C. Jeep

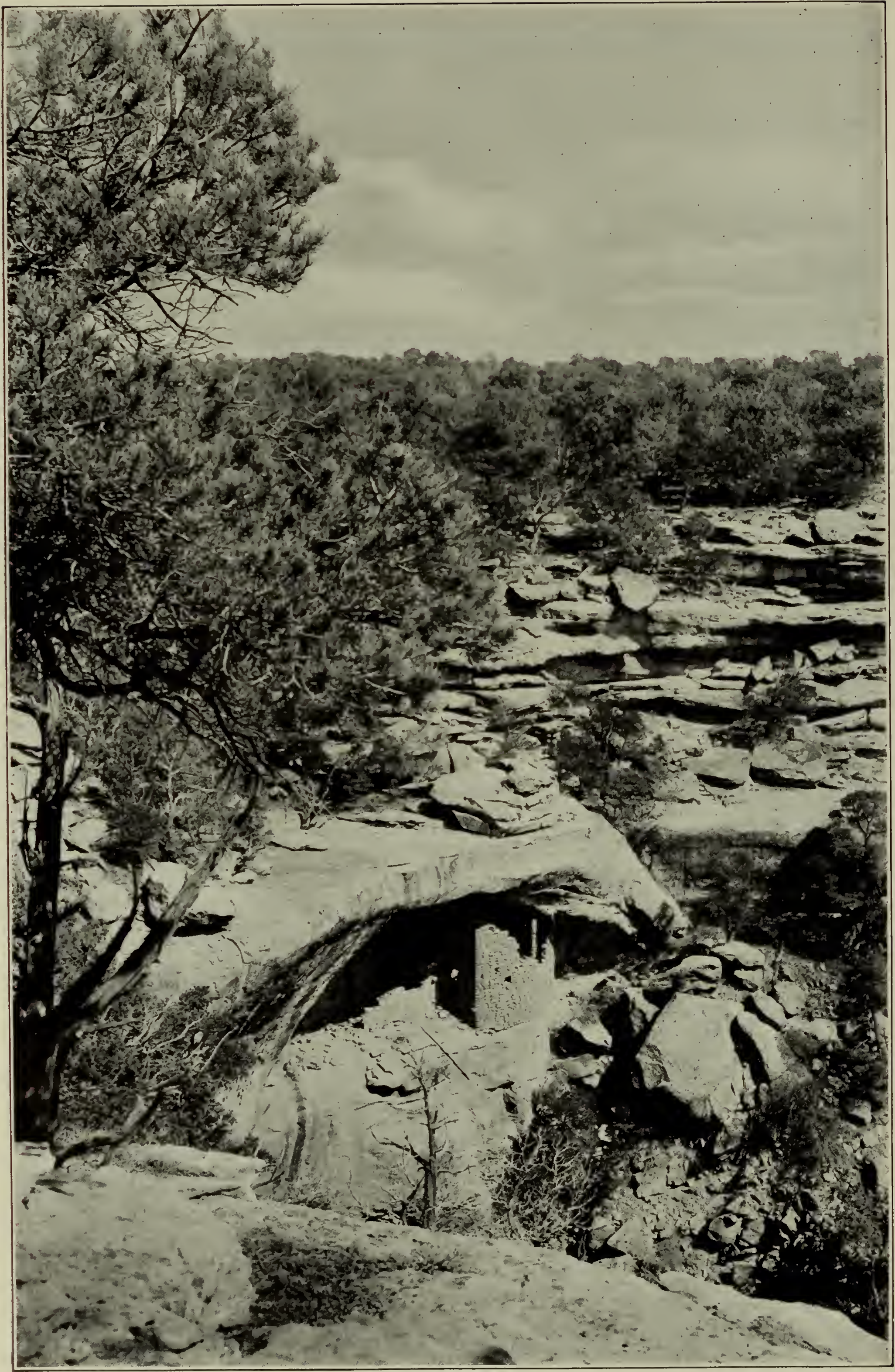
The Trail to Balcony House

The Entrance to Balcony House



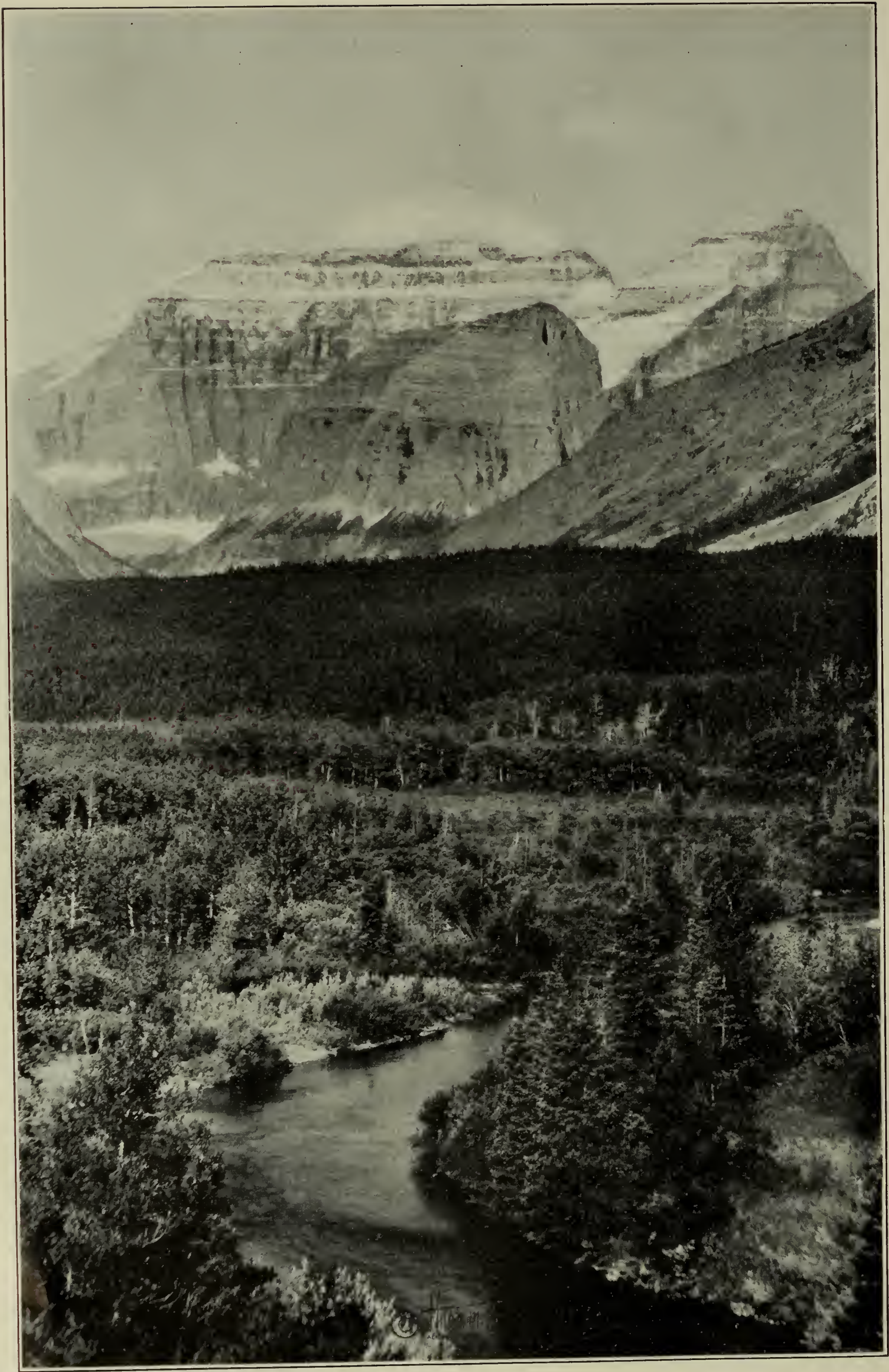
Photograph by Pen Dike Studio

Balcony House is One of the Most Interesting and Best Preserved



The Cliff Dwellers Utilized all Protected Space Within the Caves

# GLACIER NATIONAL PARK



*Copyright by Hileman*

Mount Cleveland, Highest Summit in Glacier

*Copyright by Hileman*

GUNSIGHT PASS FROM SHORE OF GUNSIGHT LAKE

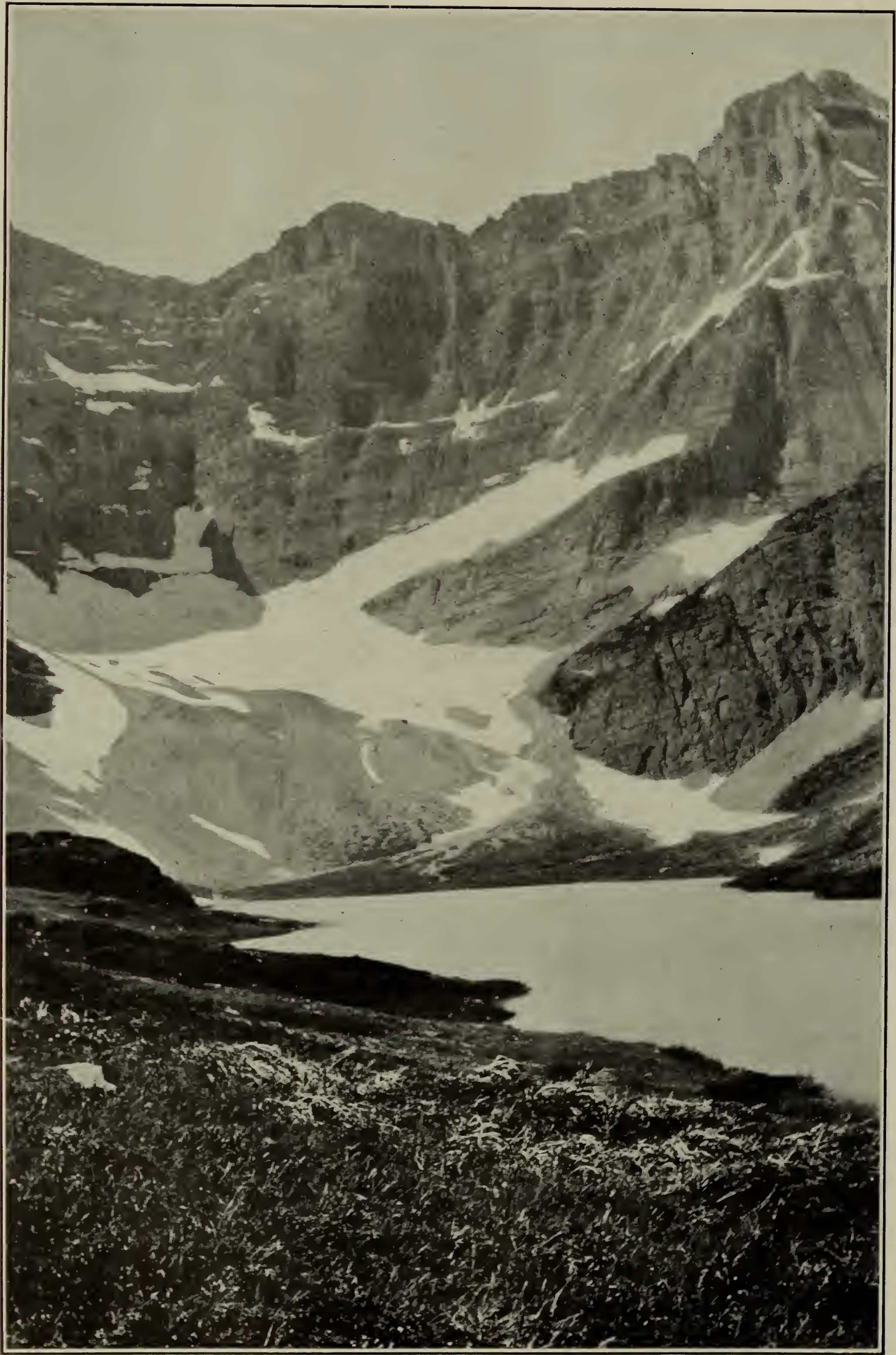
# AN ALPINE PARADISE

NOTWITHSTANDING the sixty glaciers from which it derives its name, the Glacier National Park is chiefly remarkable for its picturesquely modeled peaks, the unique quality of its mountain masses, its gigantic precipices, and the romantic loveliness of its two hundred and fifty lakes.

Though most of our national parks possess similar general features in addition to those which sharply differentiate each from every other, the Glacier National Park shows them in special abundance and unusually happy combination. In fact, it is quite extraordinary, almost sensational, massing of these scenic elements which gives it its marked individuality.

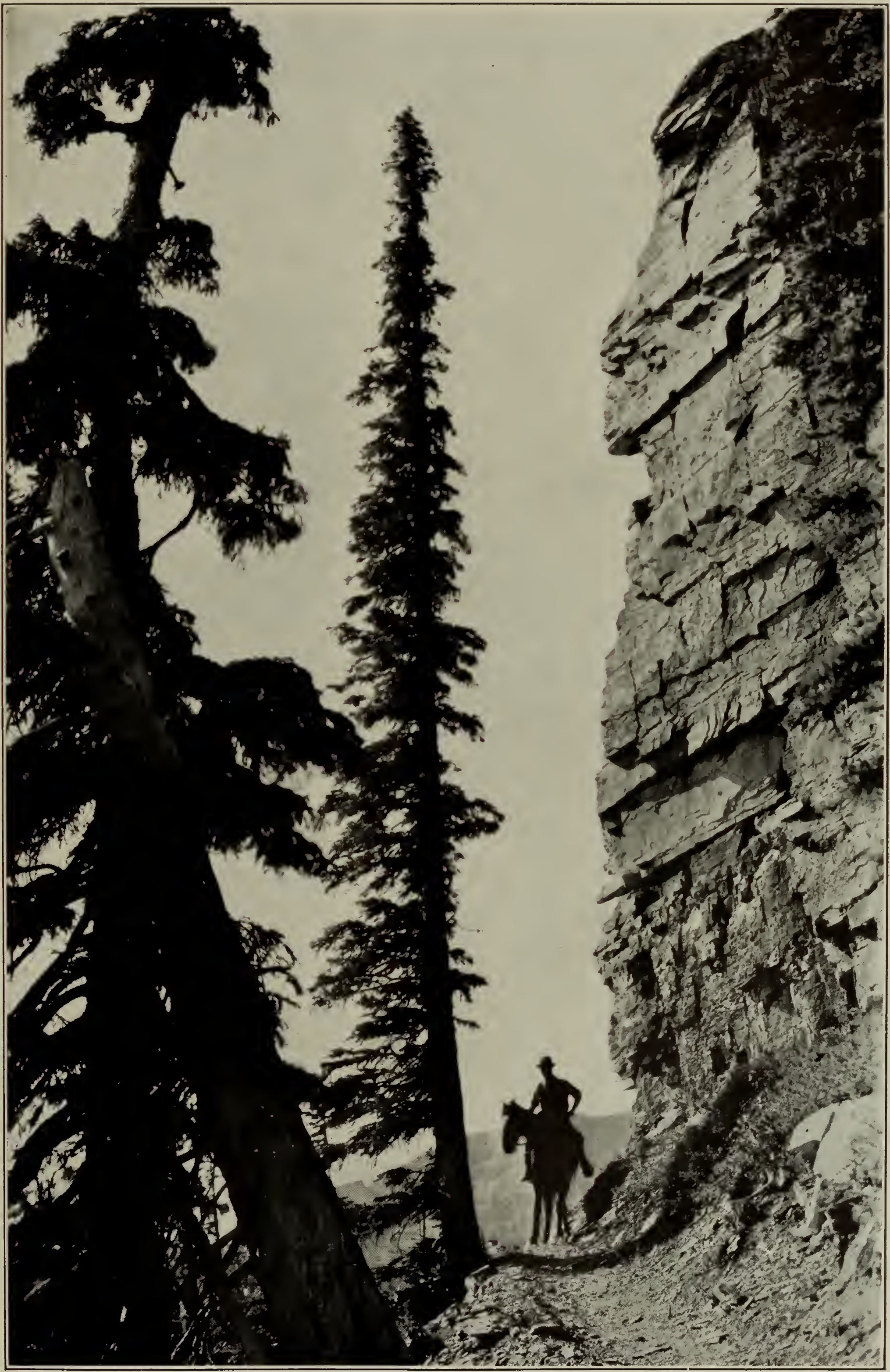
The broken and diversified character of this scenery, involving rugged mountain tops bounded by vertical walls sometimes more than four thousand feet high, glaciers perched upon lofty rocky shelves, unexpected waterfalls of peculiar charm, rivers of milky glacier water, lakes unexcelled for sheer beauty by the most celebrated of sunny Italy and snow-topped Switzerland, and grandly timbered slopes sweeping into valley bottoms, offer a continuous yet ever changing series of inspiring vistas not to be found in such luxuriance and perfection elsewhere.

Glacier National Park lies in western Montana, abutting the Canadian boundary. Waterton Lakes Park joins it on the Canadian side.



*Photograph by Beatrix Barber*

CRACKER LAKE AND SIYEH GLACIER



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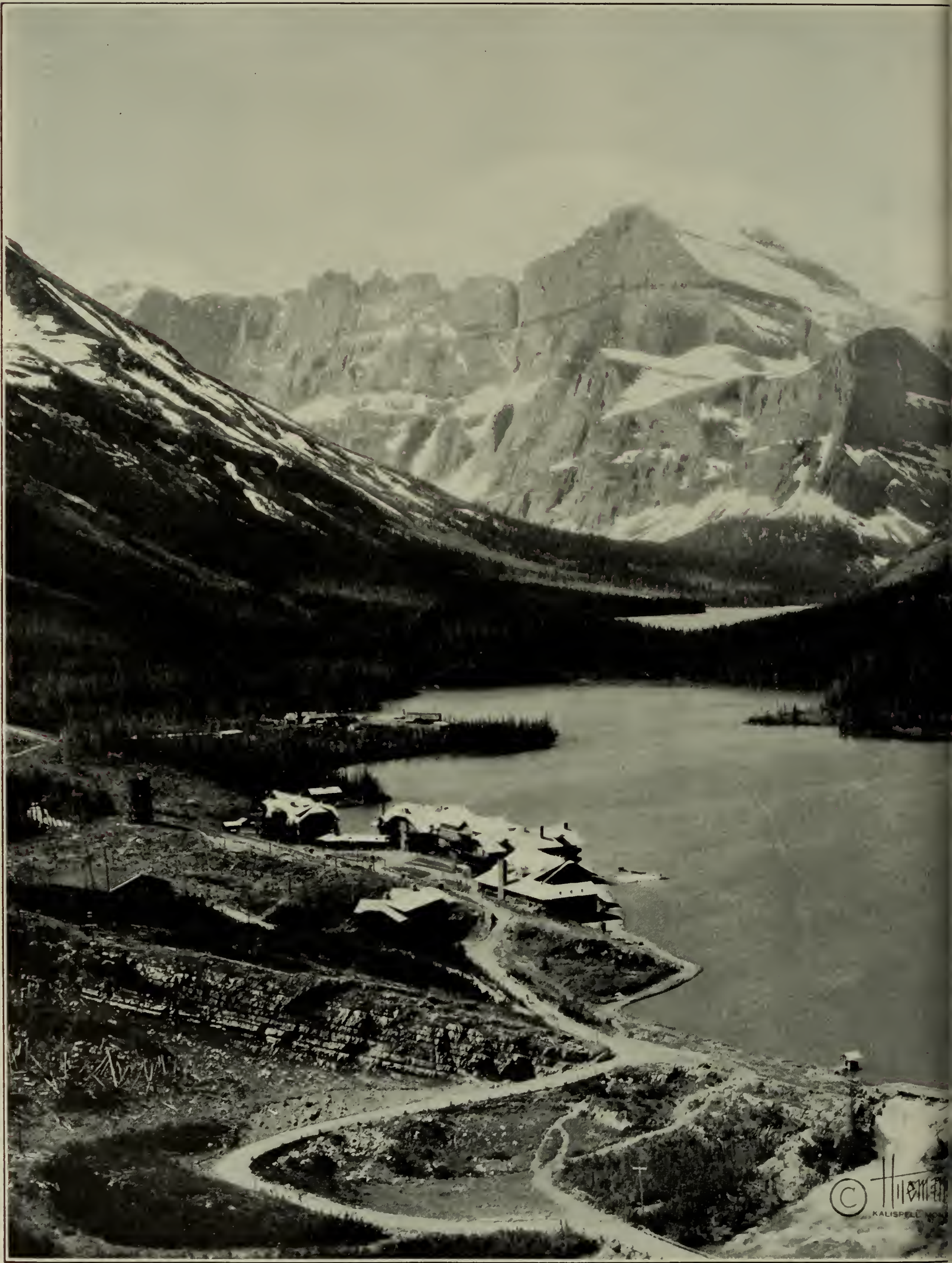
Scarface Point, on the Garden Wall Trail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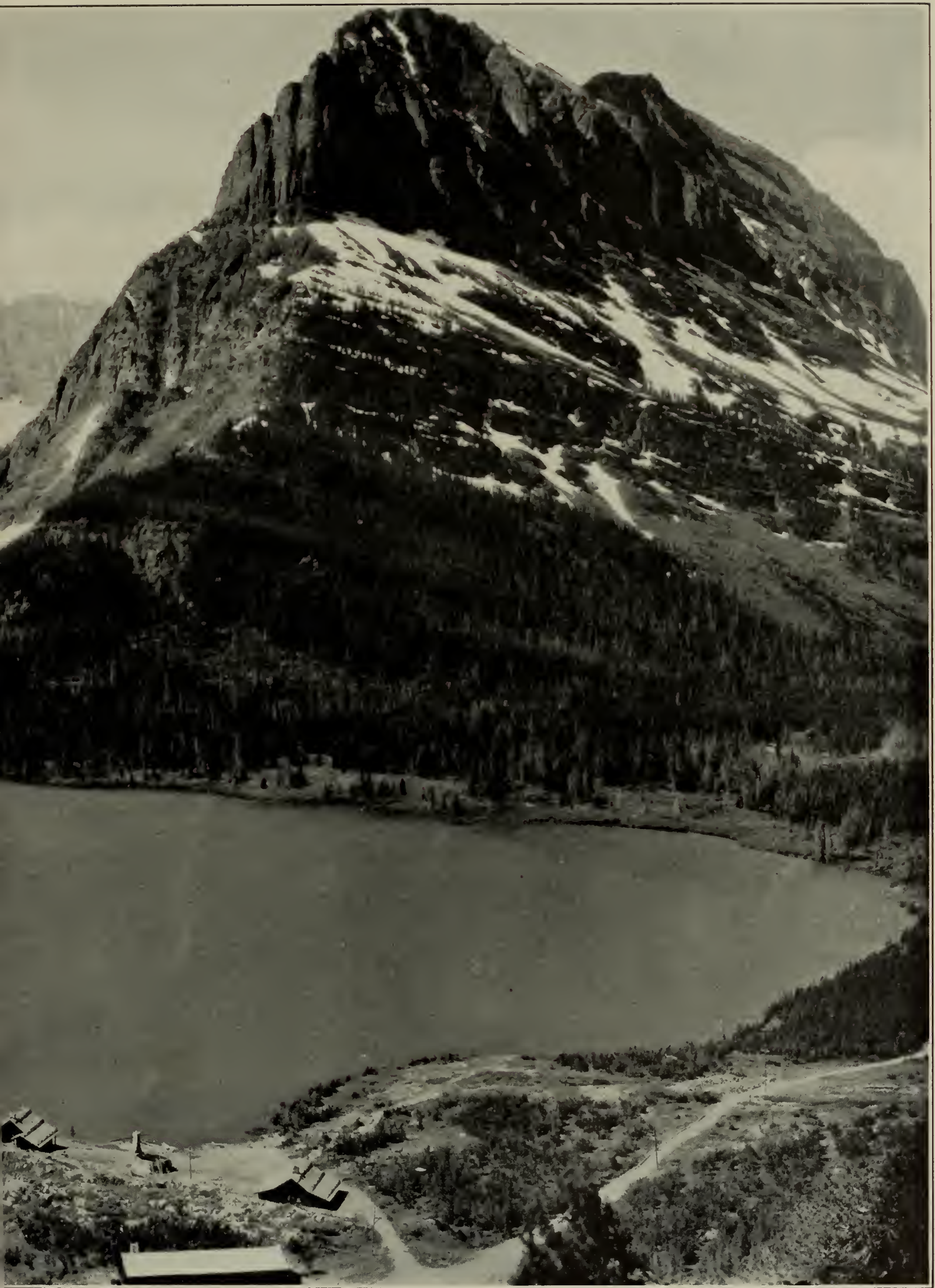
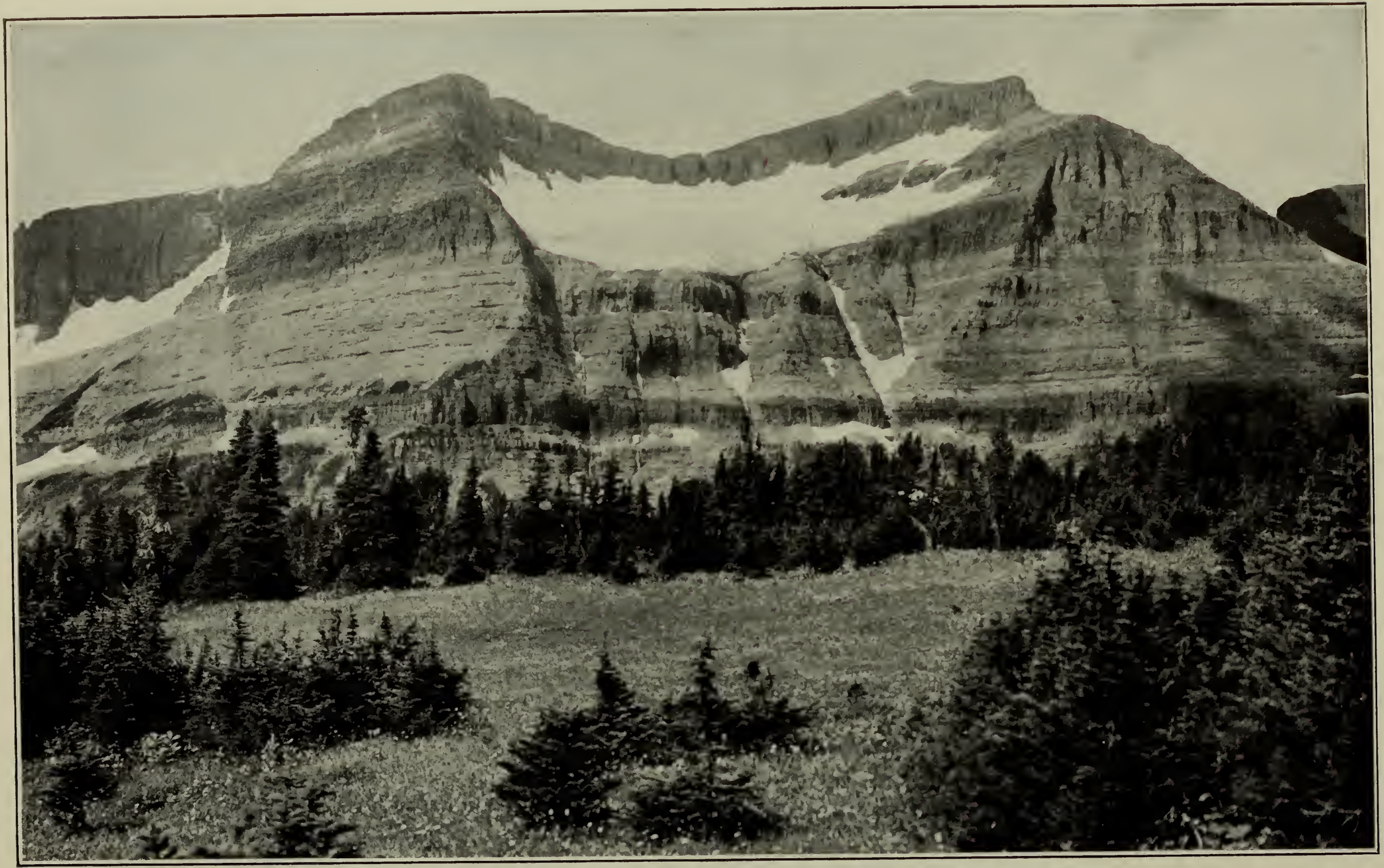
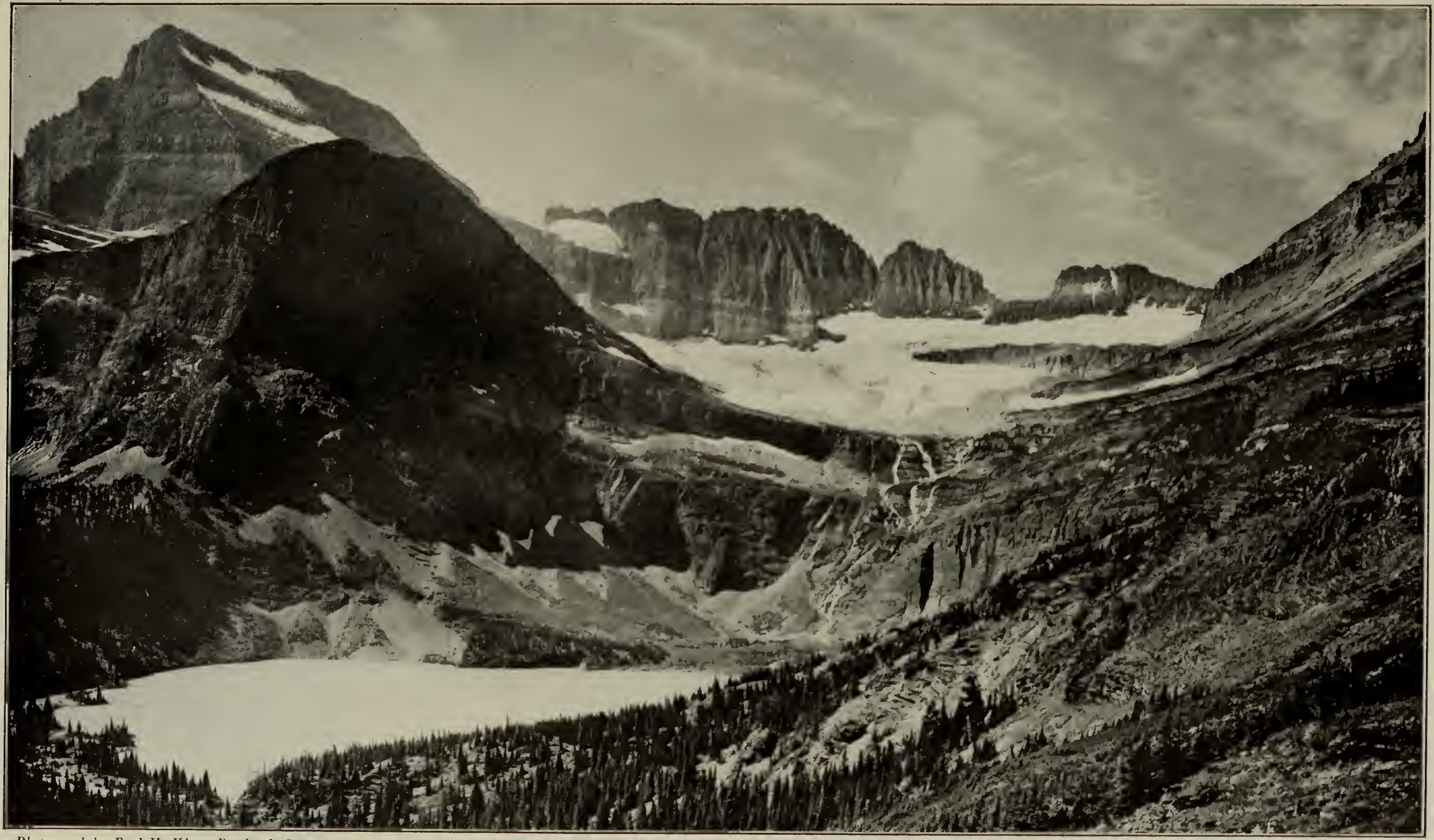
It is the Romantic, Almost Sensational Massing of Extraordinary Scenic
Beautiful Swiftcurrent Lake, in Many



ements Which Gives the Glacier National Park Its Marked Individuality
acier region, Many Glacier Hotel to the left



Piegan Mountain Near Piegan Pass, from the Flower Gardens of Siyeh Basin



*Photograph by Fred H. Kiser, Portland, Oreg.*

FAMOUS GRINNELL LAKE, FED BY THE PICTURESQUE GRINNELL GLACIER ABOVE

On the left is Gould Mountain. Grinnell Mountain, on the right, is one of the noblest in America. This region is a favorite haunt of Rocky Mountain goats

# MAKING A NATIONAL PARK

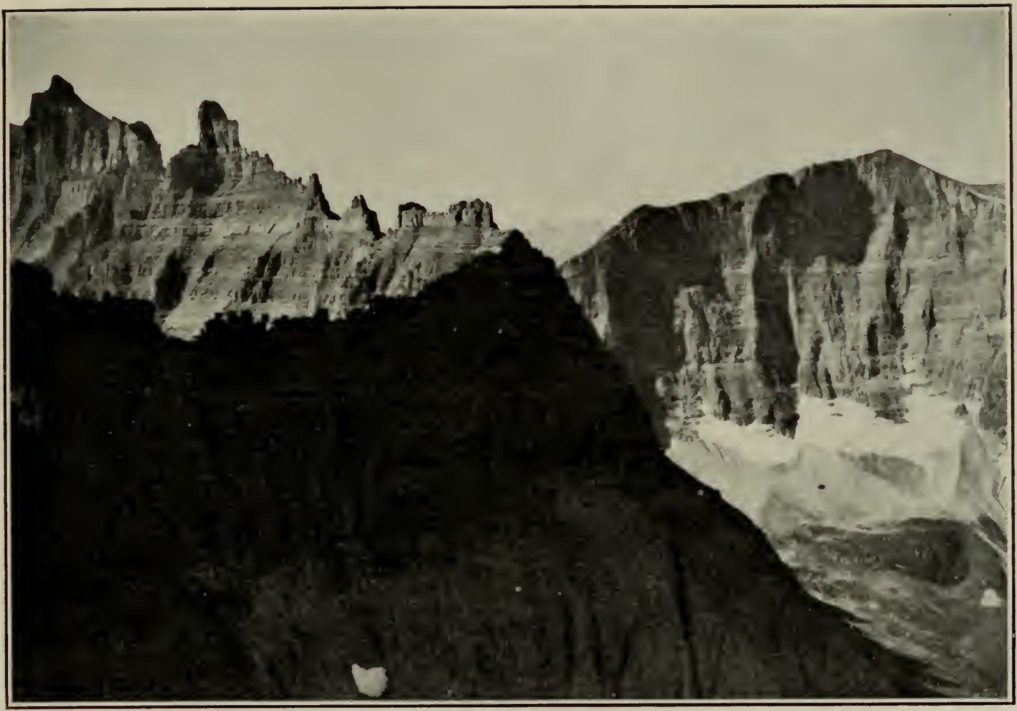
HOW nature, just how many millions of years ago no man can estimate, made the Glacier National Park is a stirring story. Once this whole region was covered with the prehistoric sea. The earthy sediments deposited by this water hardened into rocky strata. If you were in the park to-day you would see broad horizontal streaks of variously colored rock in the mountain masses thousands of feet above you. They are discernible in the photographs in this book. They are the very strata that the waters deposited in their depths in those far-away ages. How they got from the seas' bottoms to the mountains' tops is the story.

In the settling of the earth's masses into their present shape, mountain ranges have arisen from the sea by internal pressures. Just as the squeezed orange bulges in places, so this region was forced upward. Then it cracked and the western edge of the earth's skin was thrust far over the eastern edge.

The edge thus thrust over was many thousands of feet thick and disclosed all the geological strata which had been deposited at that time. In the many centuries of centuries since all these strata have been washed away except the bottom layer of the overthrust skin. The rock thus disclosed is at least eighty millions of years old. It is the same rock as the Grand Canyon. Glacier National Park is the Canadian Rockies done in Grand Canyon colors. Frost and rains and glaciers have marvelously carved it.

*Photograph by Ellis Prentice Cole*

ICEBERG LAKE WHERE FLOES DRIFT IN AUGUST



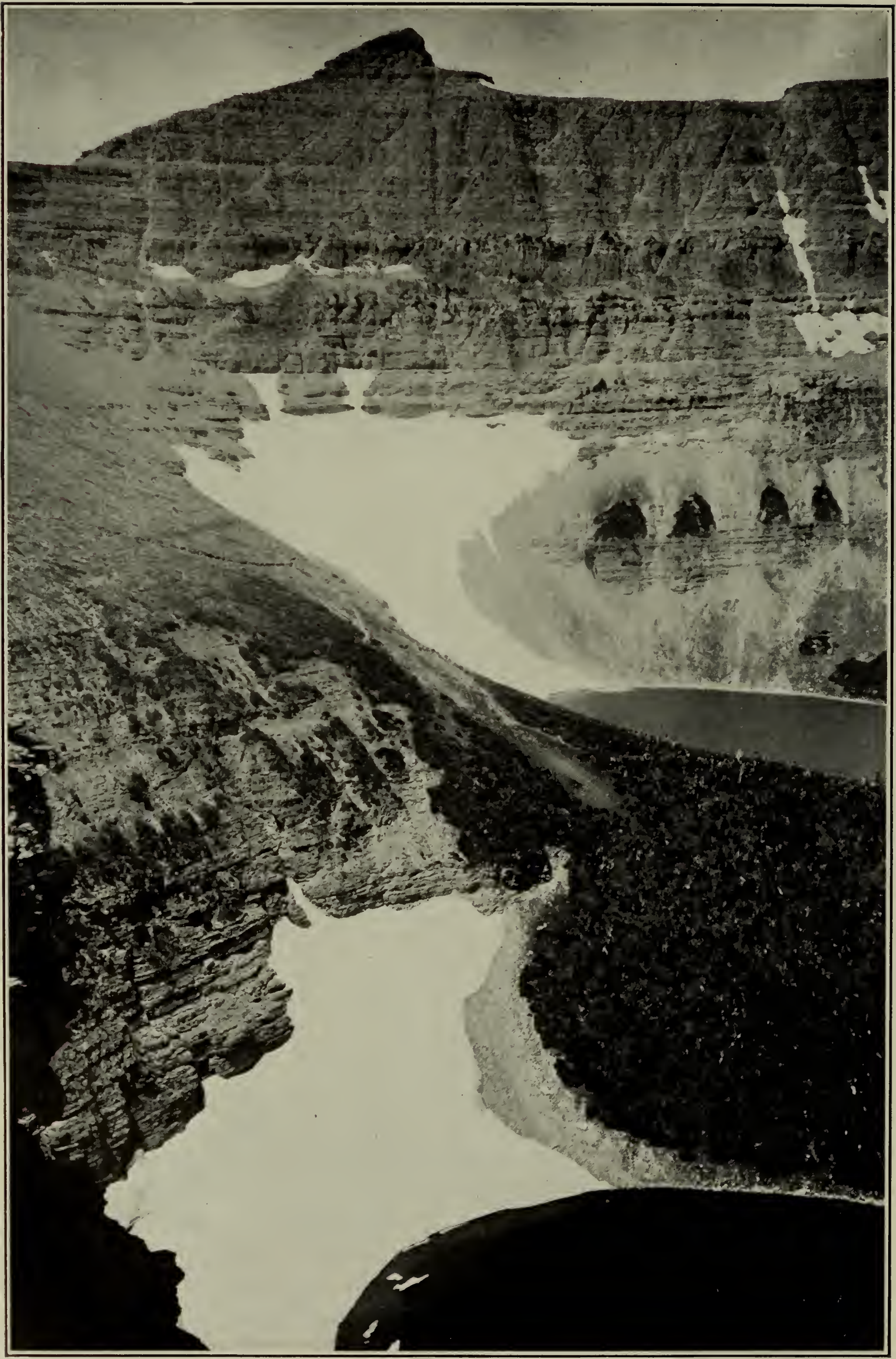
*Photograph by A. S. Thiri*

The Circular Wall on the Left Incloses Iceberg Lake. The Enormous Cirque on the Right, with Lake Helen Shown in the Lower Right-Hand Corner, is the Source of the South Fork of the Belly River

# THE CARVING OF GLACIER

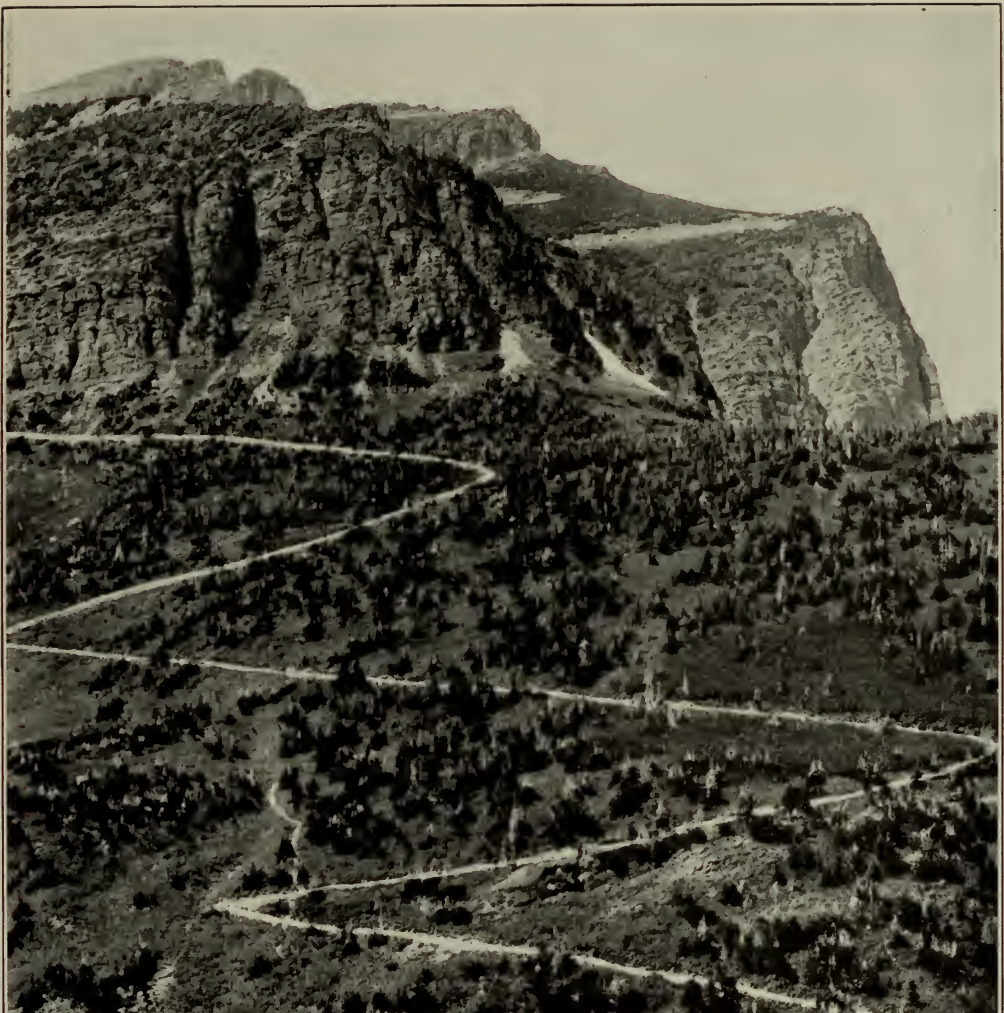
THE titanic overthrust which makes Glacier what it is was not accomplished all at once. The movement covered millions of years; change might even have been imperceptible in the life of one living there—though this was long before man. And during these same many millions of years frost and water and wind and glacier erosion were wiping off the upper strata and carving the ancient rocks that still remain into the thing of beauty that Glacier is to-day. To picture this region, imagine a chain of very lofty mountains twisting about like a worm, spotted with snow fields and bearing glistening glaciers. Imagine them flanked everywhere by lesser peaks and tumbled mountain masses of smaller size in whose hollows lie the most beautiful lakes you have ever dreamed of.

Those who have seen the giant glaciers of Mount Rainier or the Alps will here see what glaciers of much greater size accomplished in ages past. Iceberg Lake, for example, is a mighty bowl shaped like a horseshoe, with sides more than two thousand feet high. A glacier hollowed it. Just north of it, the Belly Glacier hollowed another mammoth bowl of even greater depth; the wall dividing them is seen in the photograph on this page. Vast pits such as these were dug by prehistoric glaciers into both sides of the mountains. Often they nearly met, leaving precipitous walls. Sometimes they met; thus were created the passes.



*Photograph by A. J. Baker*

CIRQUE AT THE HEAD OF CUT BANK RIVER, SHOWING MOUNT MORGAN



*Copyright by Hileman*

Switchbacks on Swiftcurrent Mountains

# ITS LAKES AND VALLEYS

*Photograph by Fred H. Kiser, Portland, Oreg.*

THE supreme glory of the Glacier National Park is its lakes. The world has none to surpass, perhaps few to equal them. Some are valley gems grown to the water's edge with forests. Some are cradled among precipices. Some float ice fields in midsummer.

From the Continental Divide seven principal valleys drop precipitously upon the east, twelve sweep down the longer western slopes. Each valley holds between its feet its greater lake to which are tributary many smaller lakes of astonishing wildness.

On the east side St. Mary Lake is destined to world-wide celebrity, but so also is Lake McDonald on the west side. These are the largest in the park.

But some, perhaps many, of the smaller lakes are candidates for beauty's highest honors. Of these, Swiftcurrent Lake with its minaretted peaks stands first—perhaps because best known, for here is one of the finest hotels in any national park and a well-equipped camp.

Upper Two Medicine Lake is another east-side candidate widely known because of its accessibility, while far to the north the Belly River Valley, difficult to reach and seldom seen, holds lakes, fed by eighteen glaciers, which will compare with Switzerland's noblest.

The west-side valleys north of McDonald constitute a little-known wilderness of the earth's choicest scenery, destined to future appreciation.

The Continental Divide is usually crossed by the famous Gunsight Pass Trail, which skirts giant precipices and develops sensational vistas in its serpentine course.

*Photograph by U. S. Reclamation Service*

Birth of a Cloud on the Side of Mount Rockwell, Two Medicine Lake

*Photograph by U. S. Reclamation Service*

Early Morning Cloud Effects at Two Medicine Lake

Romantic Rising-Wolf Mountain is seen in middle distance

*Copyright by Hileman*

Climbing Stark Peak with Guide

*Copyright by Hileman*

Party on Mount Stark with Guide

# COMFORT AMONG GLACIERS

GLACIER NATIONAL PARK has two railroad entrances. From Glacier Park, the eastern entrance, auto stages take the visitor to Two Medicine, Swiftcurrent, and St. Mary Lakes, where launch rides may be taken. Glacier Park Hotel at the railway station, and Many Glacier Hotel at Swiftcurrent Lake, are modern hotels. At Two Medicine Lake, Cut Bank Creek, St. Mary Lake, and Swiftcurrent Lake are comfortable chalets reached by auto or by auto and launch. Granite Park and Sperry Chalets are reached only by horseback or hiking, as are the camps at Crossley Lake and Waterton Lake, and Fifty Mountain Camp on Flat Top Mountain.

The visitor choosing the west entrance, at Belton, will find camps and chalets there, and auto service to the hotel at the head of beautiful Lake McDonald. This trip also may be made by a combination of automobile and boat. Lake McDonald Camp and Skyland Camps, both reached by auto, provide comfortable accommodations. Motor travel will not be possible between the east and west sides until the Transmountain Road is completed, probably about 1933.

The Fisherman's Paradise

*Photograph by U. S. Reclamation Service*

To the Victor Belong the Spoils

Mary Roberts Rinehart lunching after a morning's trouting on Flathead River

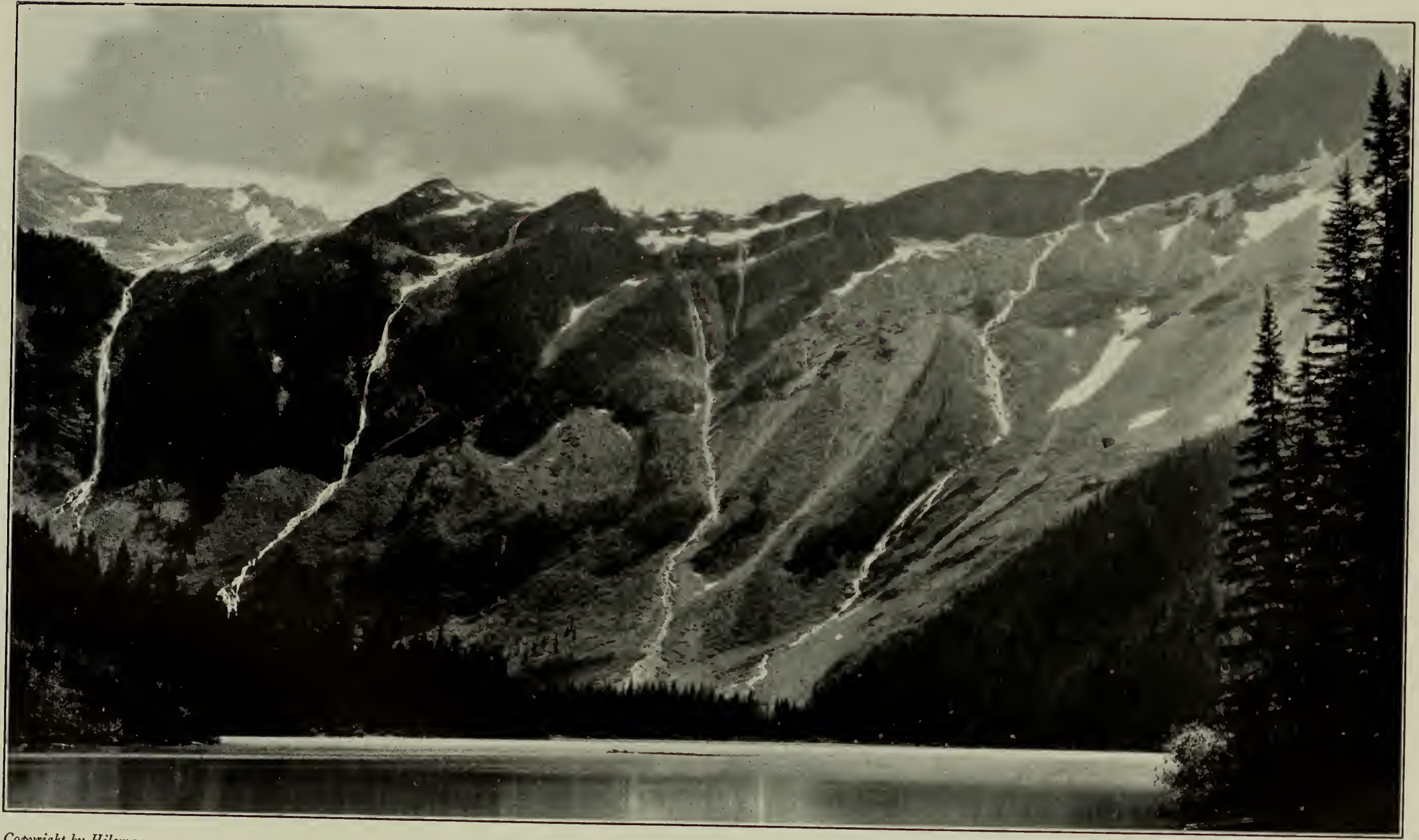
*Copyright by Hileman*

Beautiful Lake McDonald, Looking Northeast—Mount Cannon in the Middle Distance

*Photograph by U. S. Reclamation Service*

The Comfortable Hotel Near the Head of Lake McDonald

Lake Janet and Porcupine Ridge



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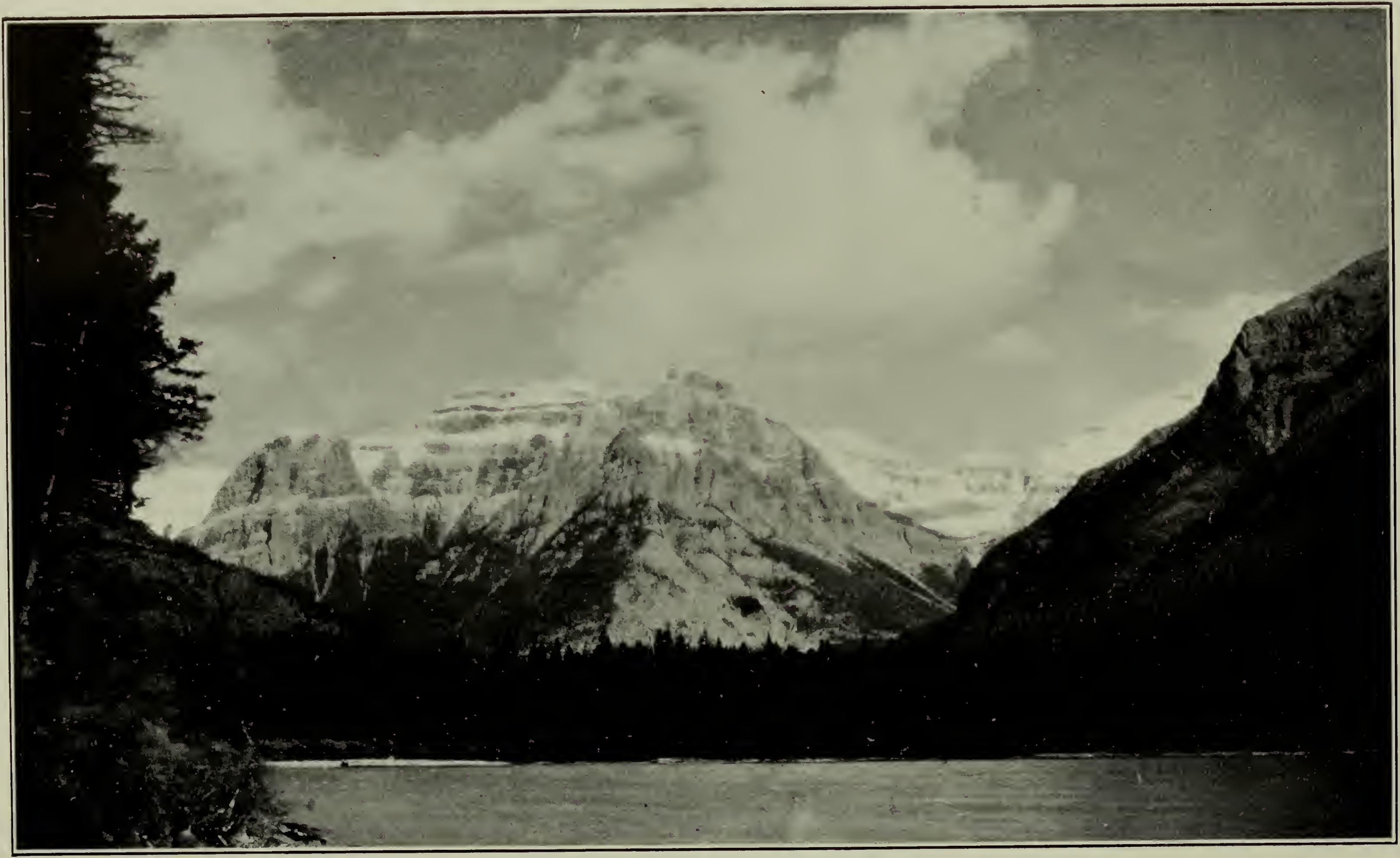
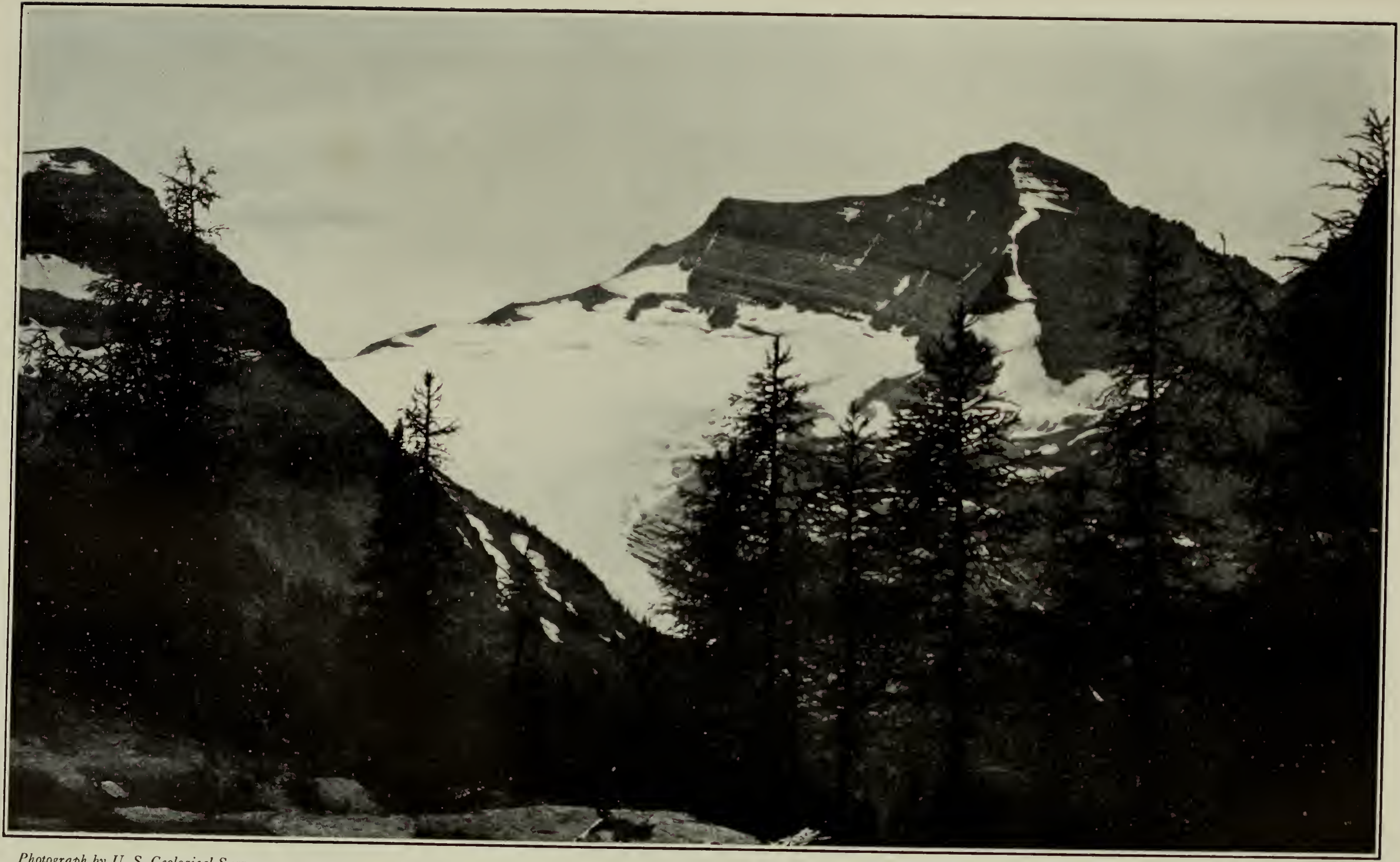
Avalanche Lake, Fed from Sperry Glacier, Lies in a Cirque Whose Precipices Are Thousands of Feet Deep



Photograph by U. S. Geological Survey

HEAD OF BEAUTIFUL BOWMAN LAKE



Photograph by U. S. Geological Survey

Kintla Glacier on the Flank of Kintla Peak

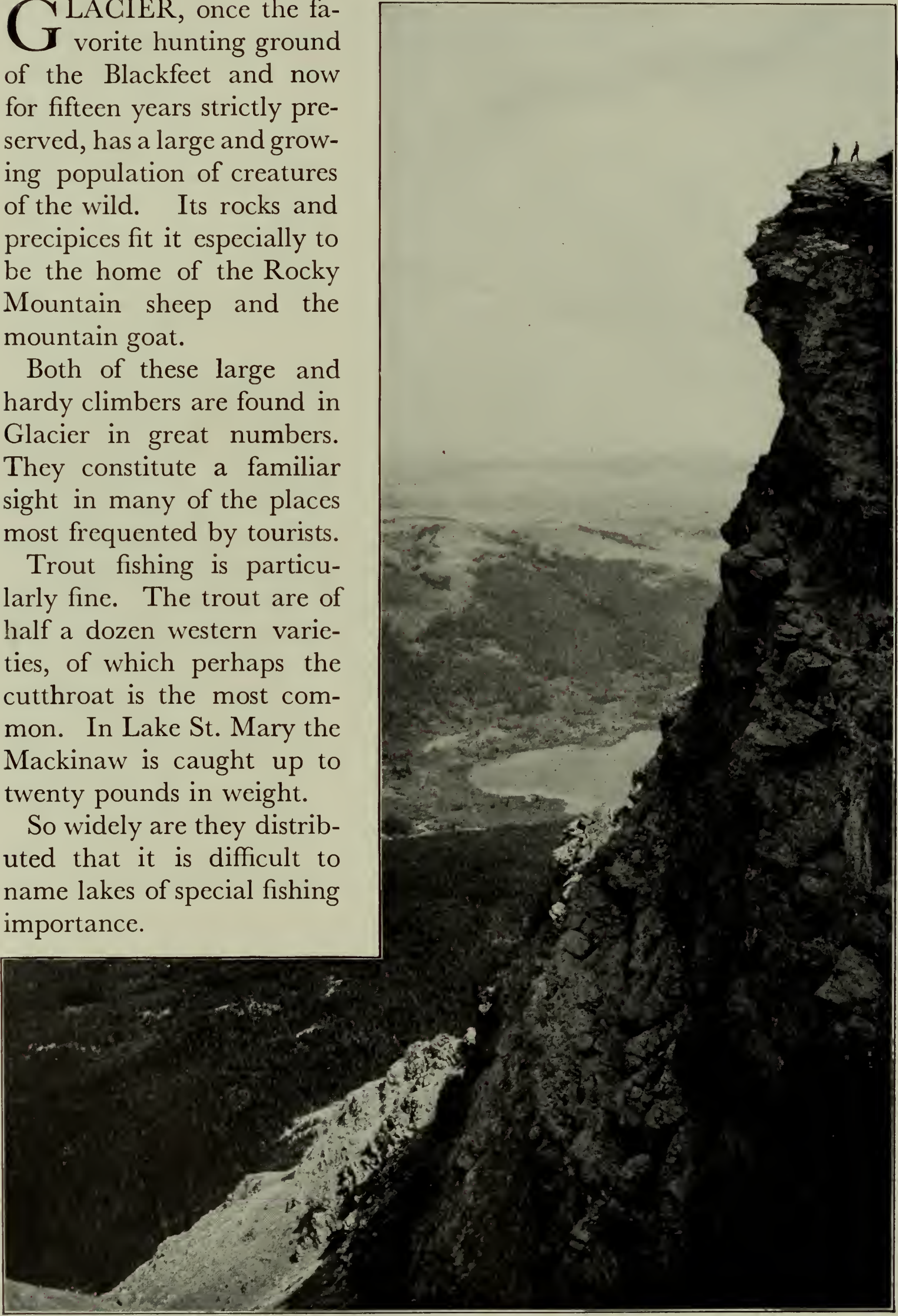
# CREATURES OF THE WILD

GLACIER, once the favorite hunting ground of the Blackfeet and now for fifteen years strictly preserved, has a large and growing population of creatures of the wild. Its rocks and precipices fit it especially to be the home of the Rocky Mountain sheep and the mountain goat.

Both of these large and hardy climbers are found in Glacier in great numbers. They constitute a familiar sight in many of the places most frequented by tourists.

Trout fishing is particularly fine. The trout are of half a dozen western varieties, of which perhaps the cutthroat is the most common. In Lake St. Mary the Mackinaw is caught up to twenty pounds in weight.

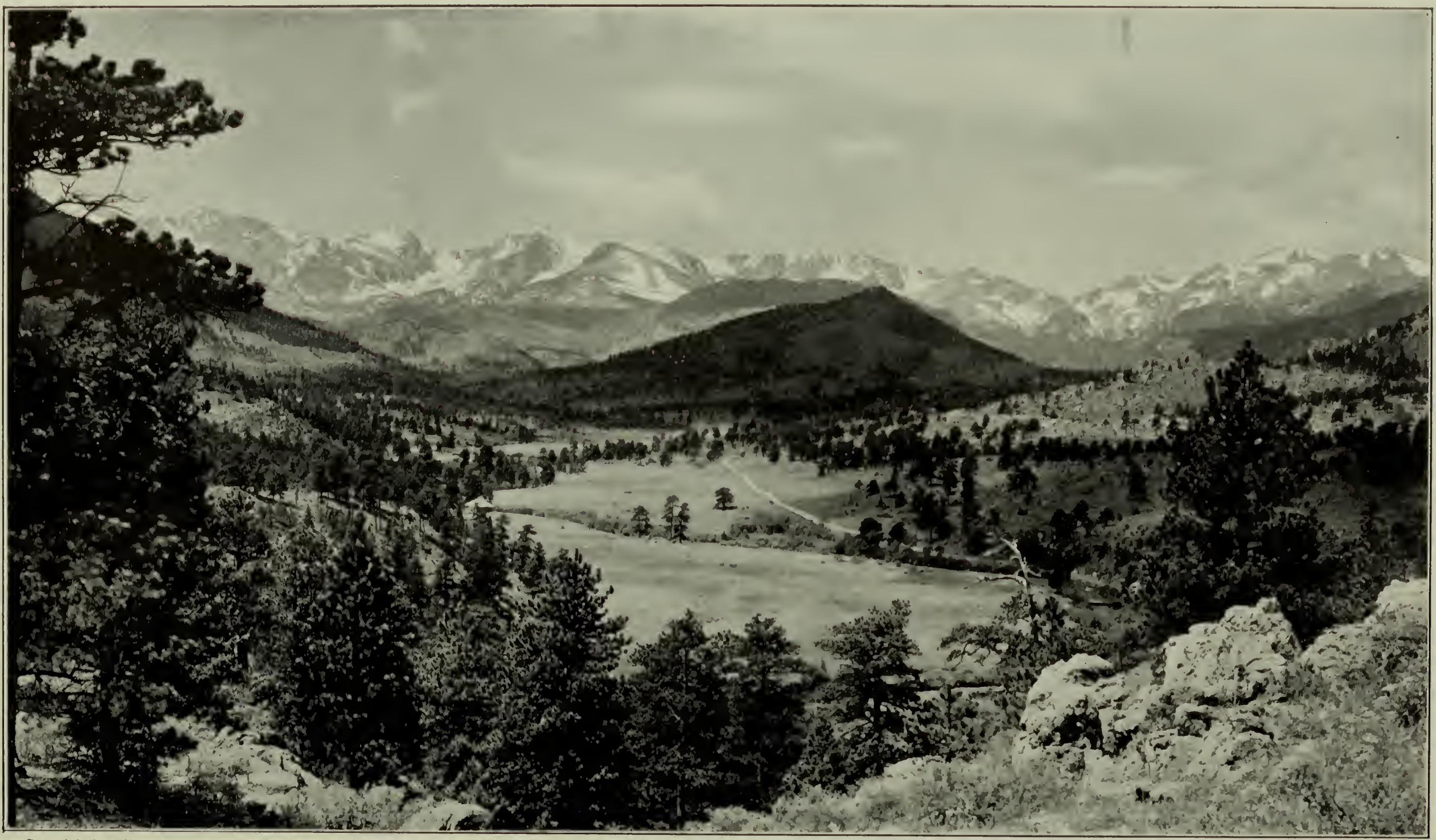
So widely are they distributed that it is difficult to name lakes of special fishing importance.



*Photograph by Fred H. Kiser, Portland, Oreg.*

SUMMIT OF APPISTOKI MOUNTAIN

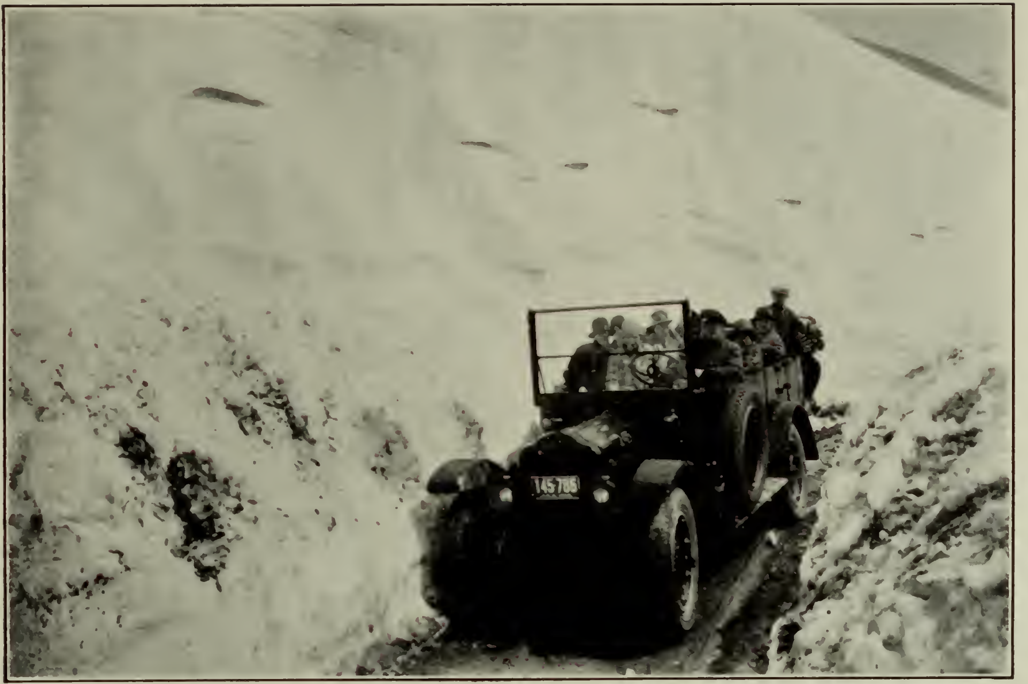
# ROCKY MOUNTAIN NATIONAL PARK



*Copyright by Wiswall Brothers, Denver*

Seen from the East, This Range Rises in Daring Relief, Craggy in Outline, Snow-Clad, Awe-Inspiring

This photograph is from the village of Estes Park and exhibits summits lying to the north of Longs Peak



*Photograph by F. J. Francis*

Crossing Fall River Pass on June 15

# "TOP OF THE WORLD"

FOR many years the Mecca of eastern mountain lovers has been the Rockies. For many years the name has summed European ideas of American mountain grandeur. Yet it was not until 1915 that a particular section of the enormous area of magnificent and diversified scenic range thus designated was chosen as the representative of the noblest qualities of the whole. This is the Rocky Mountain National Park.

And it is splendidly representative. In nobility, in calm dignity, in the sheer glory of stalwart beauty, there is no mountain group to excel the company of snow-capped veterans of all the ages which stands at everlasting parade behind its grim, helmeted captain, Longs Peak.

There is probably no other scenic neighborhood of the first order which combines mountain outlines so bold with a quality of beauty so intimate and refined. Just to live in the valleys in the eloquent and ever-changing presence of these carved and tinted peaks is itself satisfaction. But to climb into their embrace, to know them in the intimacy of their bare summits and their flowered, glaciated gorges, is to turn a new and unforgettable page in experience.

The park straddles the Continental Divide at a point of supreme magnificence. Its eastern gateway is beautiful Estes Park, a valley village of many hotels from which access up to the most noble heights and into the most picturesque recesses of the Rockies is easy and comfortable. Its western entrance is Grand Lake.

Photograph by Agnes W. Vaille

LONGS PEAK, FROM LAKE HAIYAHA

# THE KING AND HIS KINGDOM

THE Snowy Range lies, roughly speaking, north and south. From valleys 8,000 feet high the peaks rise to 12,000 and 14,000 feet. Longs Peak measures 14,255 feet.

The gentler slopes are on the west, a region of loveliness, heavily wooded, diversified by gloriously modeled mountain masses, and watered by many streams and rock-bound lakes. The western entrance, Grand Lake, is a thriving center of hotel and cottage life.

On the east side the descent from the Continental Divide is steep in the extreme. Precipices two or three thousand feet plunging into gorges carpeted with snow patches and wild flowers are common. Seen from the east-side villages, this range rises in daring relief, craggy in outline, snow-spattered, awe-inspiring.

Midway of the range and standing boldly forward from its eastern side, Longs Peak rears his lofty, square-crowned head. A veritable King of Mountains—stalwart, majestic.

Amazingly diversified is this favored region.

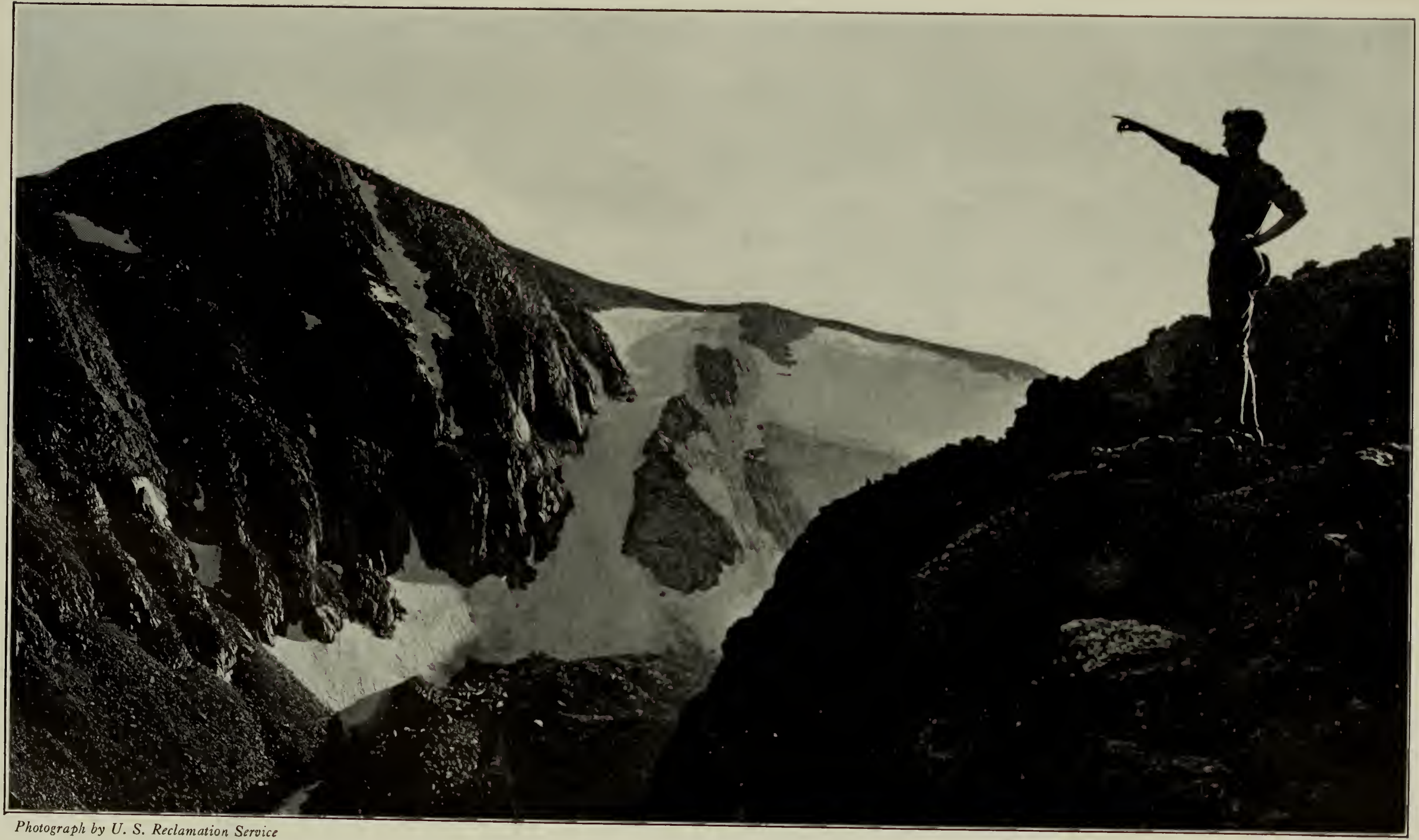
The valleys are checkered with broad, flowery opens and luxuriant groves of white-stemmed aspens and dark-leaved pines. Singing rivers and shining lakes abound. Frost-sculptured granite cliffs assume picturesque shapes. Always some group of peaks has caught and held the wandering clouds.

Very different are the mountain vistas. From the heights stretches on every hand a tumbled sea of peaks. Dark gorges open under foot. Massive granite walls, torn from their fastenings in some unimaginable upheaval in ages before man, expose their gray faces. Far in the distance lie patches of molten silver which are lakes, and threads of silver which are rivers, and mists which conceal far-off valleys. On sunny days lies to the east a dim sea which is the Great Plain.

Mount Copeland

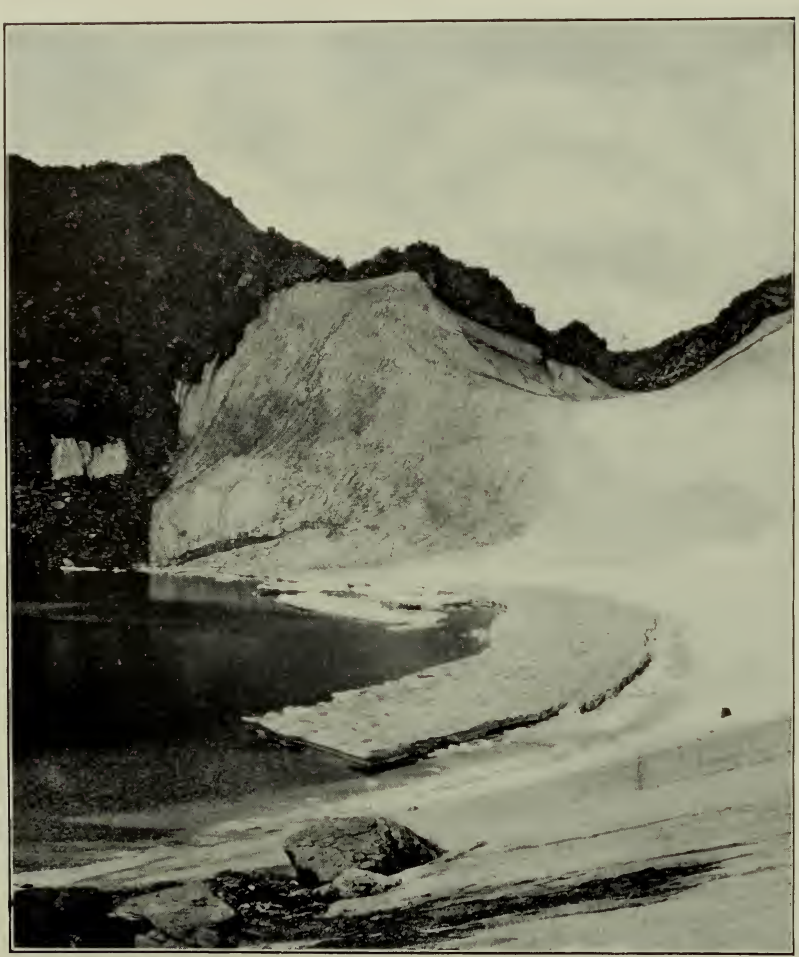
A Glimpse of the Park, Including Twin Sisters

Late Afternoon Yields Good Catches



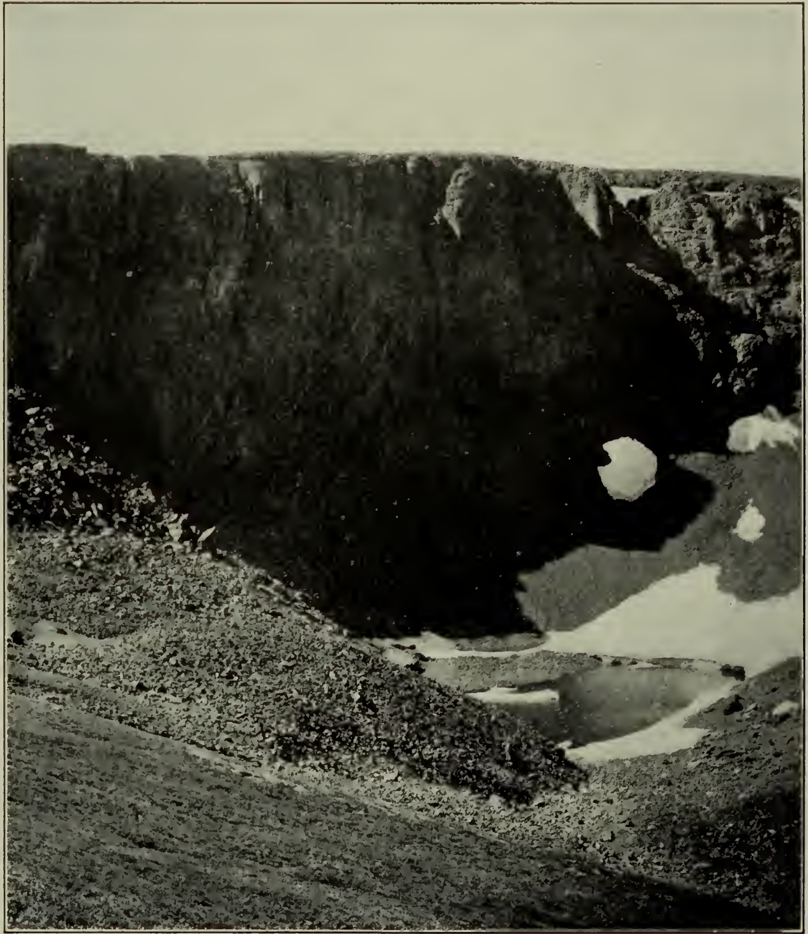
*Photograph by U. S. Reclamation Service*

To Know Them in the Intimacy of Their Bare Summits is to Turn an Unforgettable Page in the Book of Experience
Looking from Flattop across the Tyndall Glacier Gorge to the windy summit of Hallett Peak



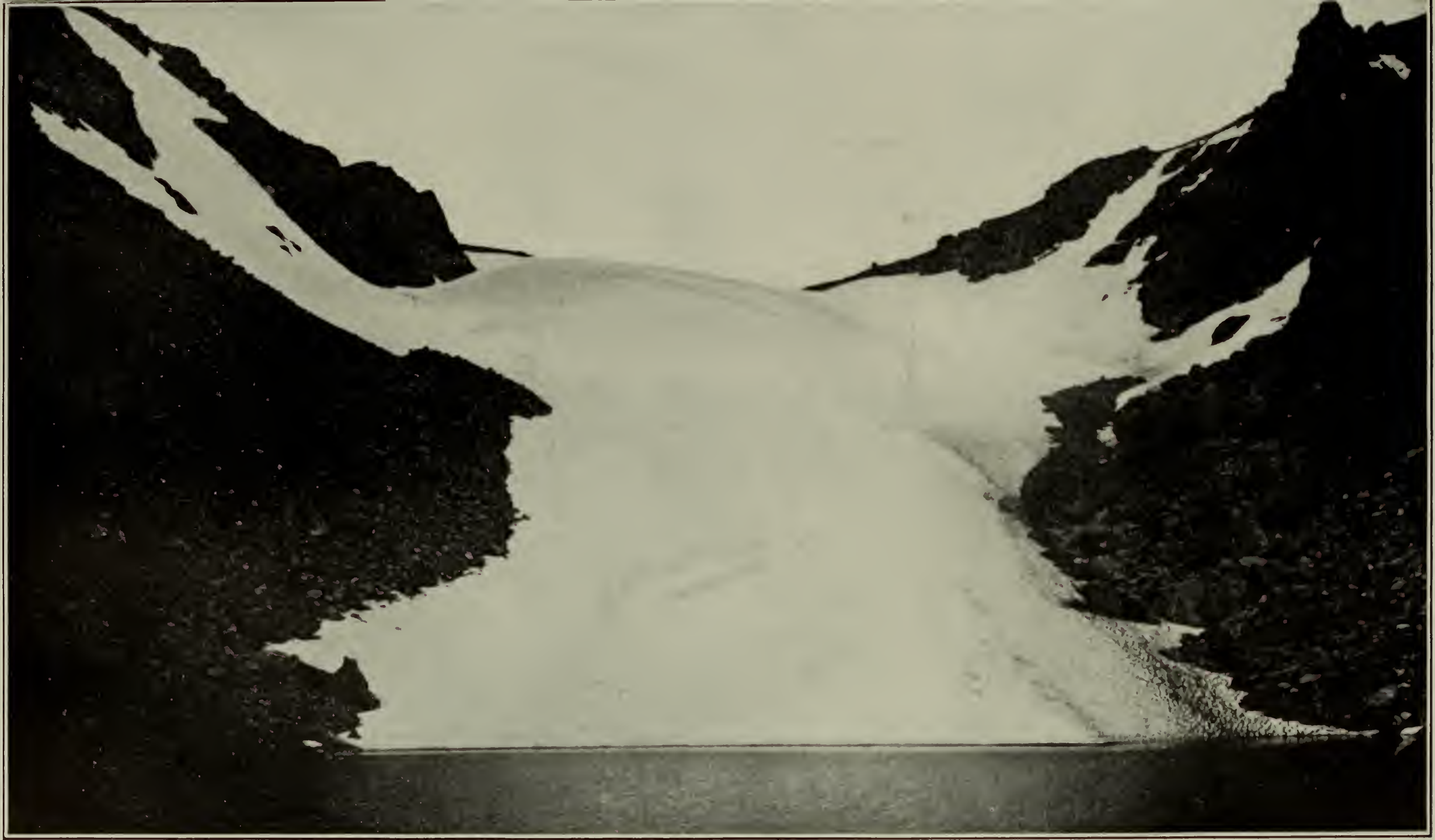
Photograph by J. Burns

ICE FLOES BREAKING FROM THE HALLETT GLACIER



Photograph by U. S. Reclamation Service

ICEBERG LAKE LIES IN A GLACIAL CIRQUE BELOW TRAIL RIDGE



*Photograph by Willis T. Lee*

ANDREWS GLACIER, ONE OF THE LARGEST IN ROCKY MOUNTAIN NATIONAL PARK

*Photograph by Enos Mills*

# RECORDS OF THE GLACIERS

*Photograph by U. S. Reclamation Service*

Moonlight on Grand Lake

A FEATURE of this region is the readability of its records of glacial action during the ages when America was making. In few other spots do these evidences, in all their variety, make themselves so prominent to the casual eye.

There is scarcely any part of the eastern side where some enormous moraine does not force itself upon passing attention. One of the broad valleys, Moraine Park, is so named from a moraine built out for miles across the valley's floor by ancient parallel glaciers.

There are innumerable sparkling lakes, many of them nestling in bowls of solid granite that were hollowed out by glaciers. The gorges are walled in by spectacular glacial cirques or amphitheaters.

In short, this park is itself a primer of glacial geology whose simple, self-evident lessons immediately disclose the key to one of nature's chief scenic secrets.

*Photograph by John King Sherman*

The Chiseled Western Wall of Loch Vale

# PRECIPICE-WALLED GORGES

A DISTINGUISHED feature of the park is its profusion of cliff-cradled, glacier-watered valleys unexcelled for wildness and the glory of their flowers. Here grandeur and romantic beauty compete.

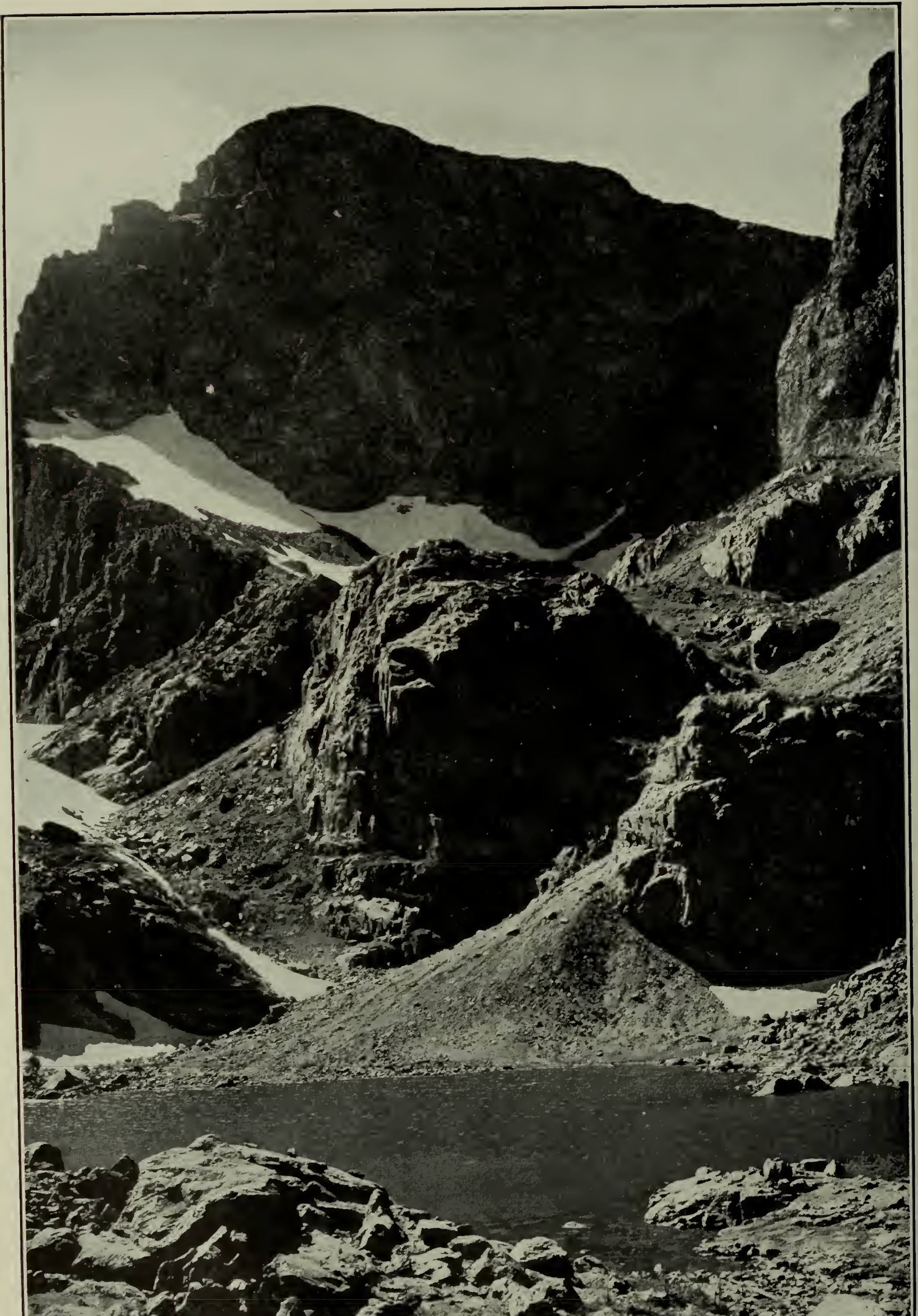
These valleys lie in two groups, one north, the other south of Longs Peak, in the angles of the main range; the northern group called the Wild Gardens, the southern group called the Wild Basin.

There are few spots, for instance, so impressively beautiful as Loch Vale, with its three shelved lakes lying two thousand feet sheer below Taylor Peak. Adjoining is Glacier Gorge at the foot of the precipitous north slope of Longs Peak, holding in rocky embrace its own group of three lakelets.

The Wild Basin, with its wealth of lake and precipice, still remains unexploited and known to few.

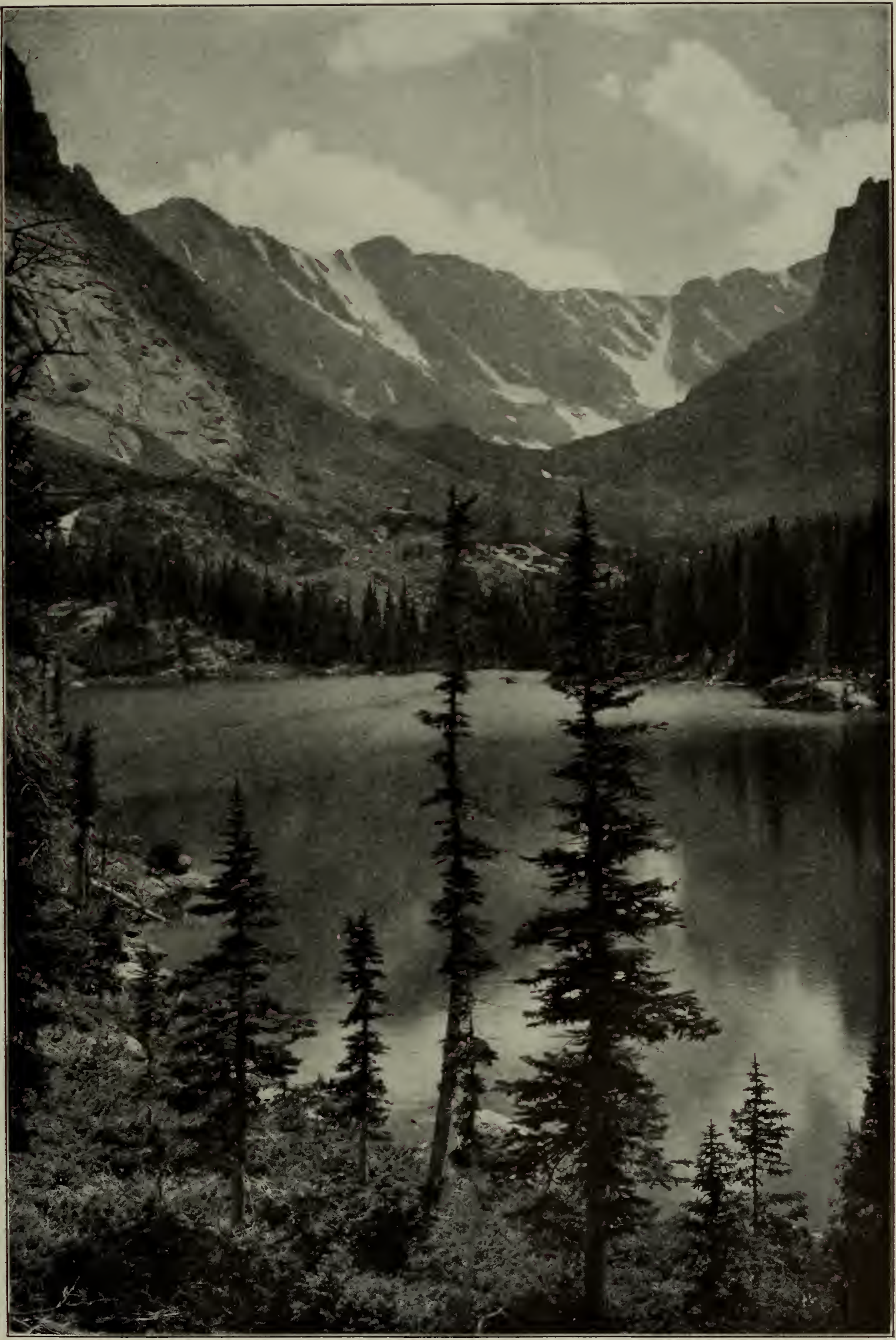
*otograph by John King Sherman*

Chasm Lake and Longs Peak

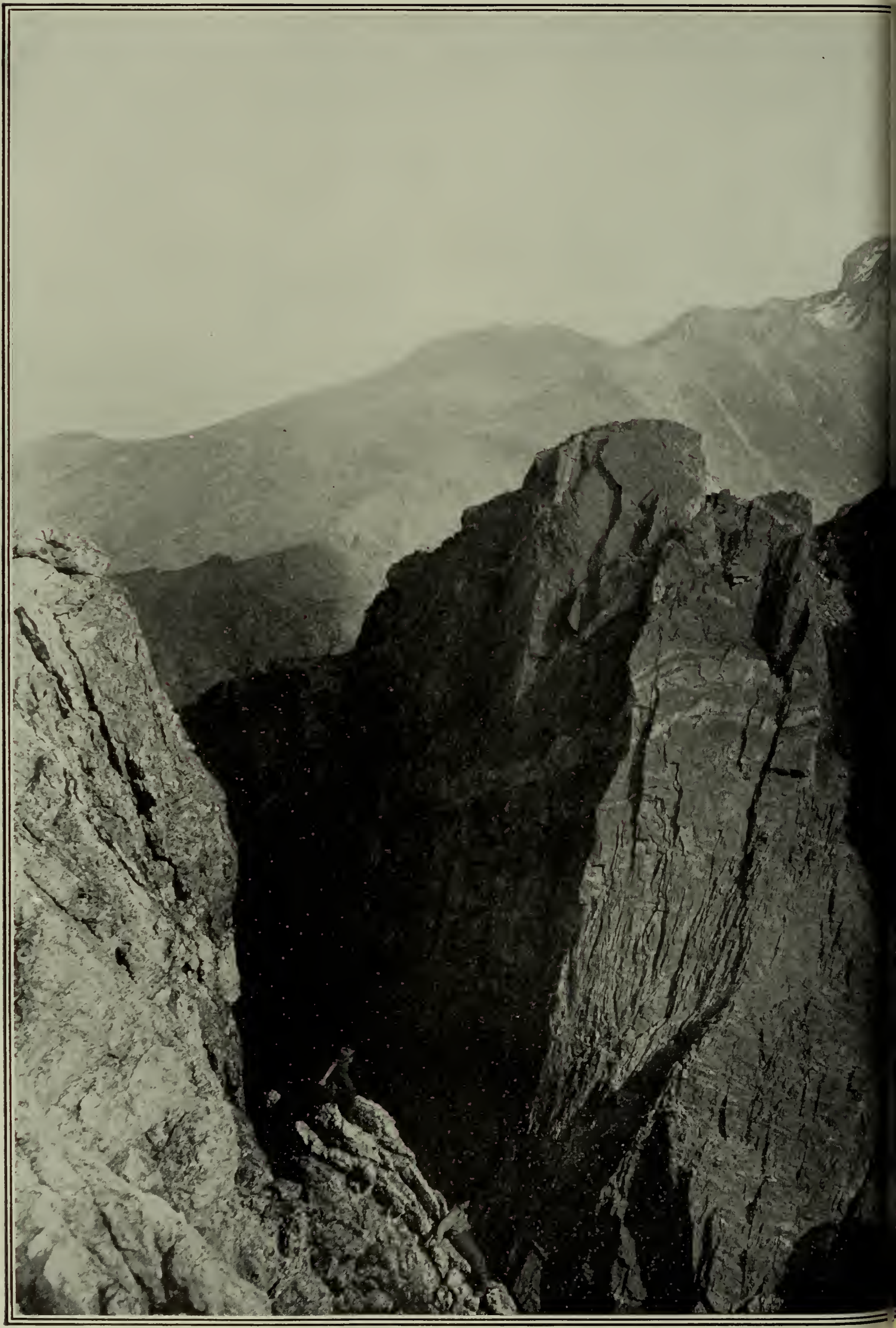


*Photograph by Wiswall Brothers*

Sky Pond and Taylor Peak, Wild Gardens



Few Mountain Gorges are so Impressively Beautiful as Loch Vale

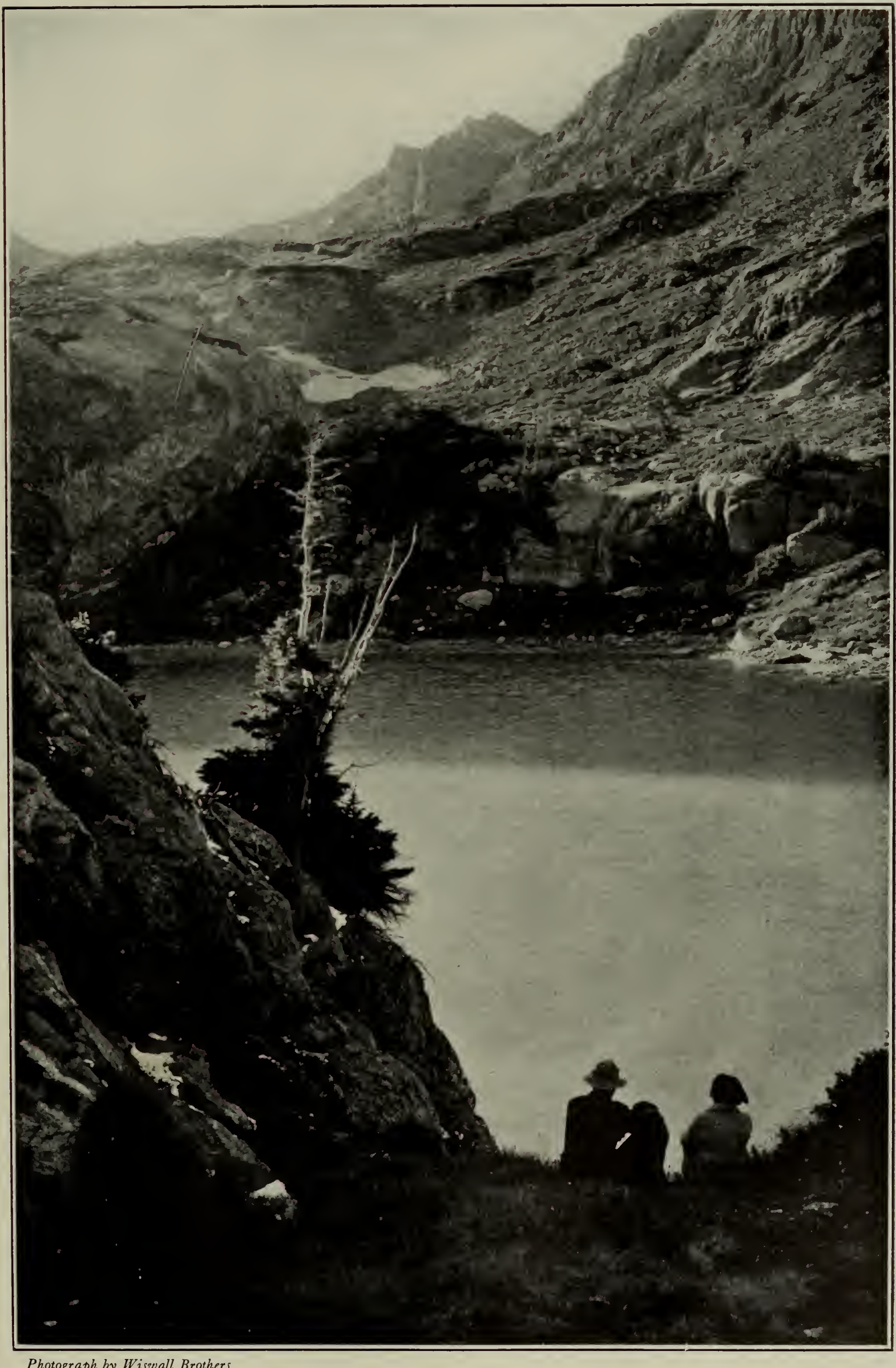


Midway of the Range, Longs Peak Rears His Stately, Square-Crowned
This is the very heart of the Rockies; few photo

ad; a Veritable King of Mountains Calmly Overlooking All His Realm
phs so fully express the spirit of the Snowy Range

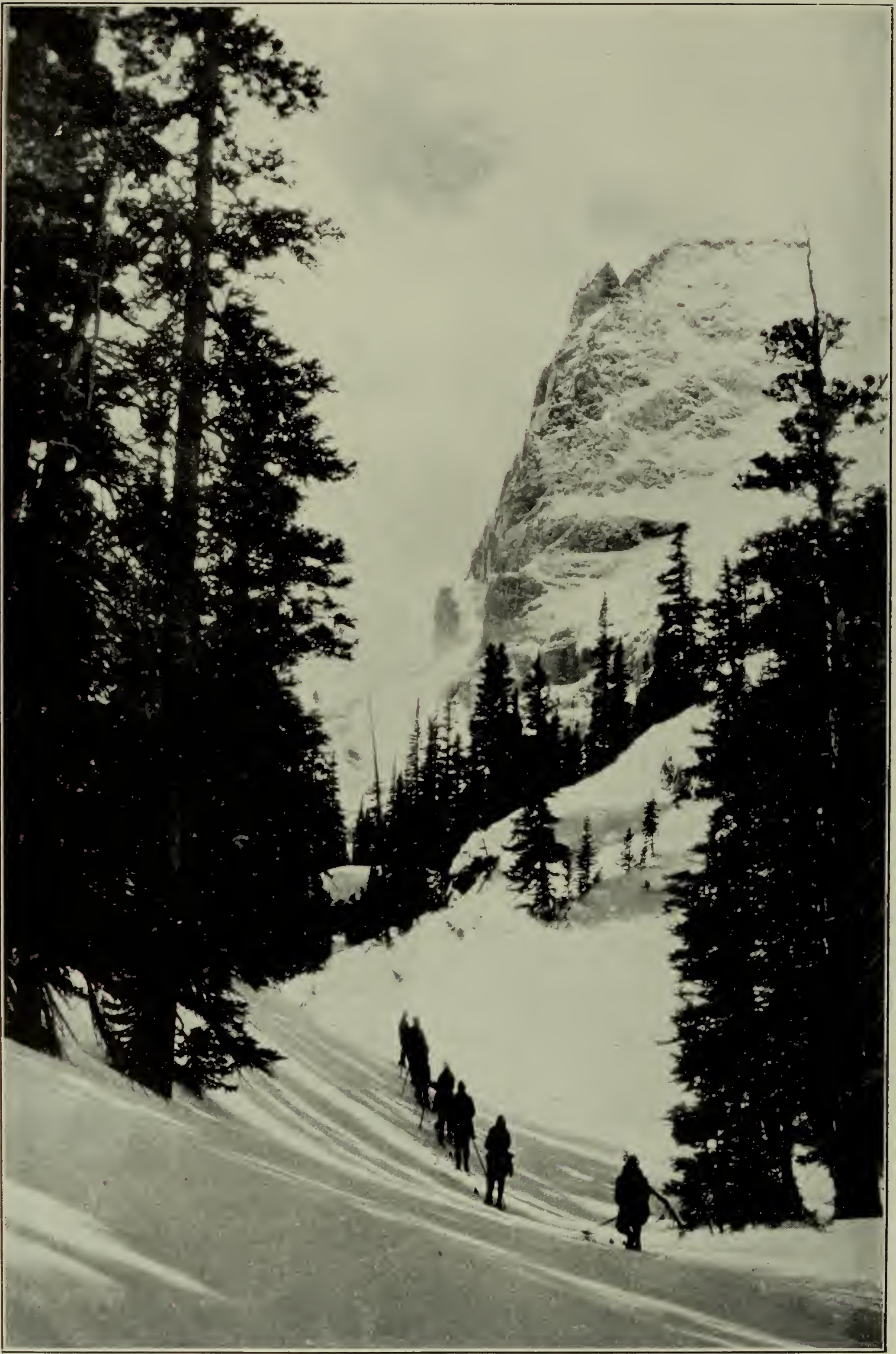
*Copyright by F. P. Clatworthy*

Nymph Lake and Hallett Peak



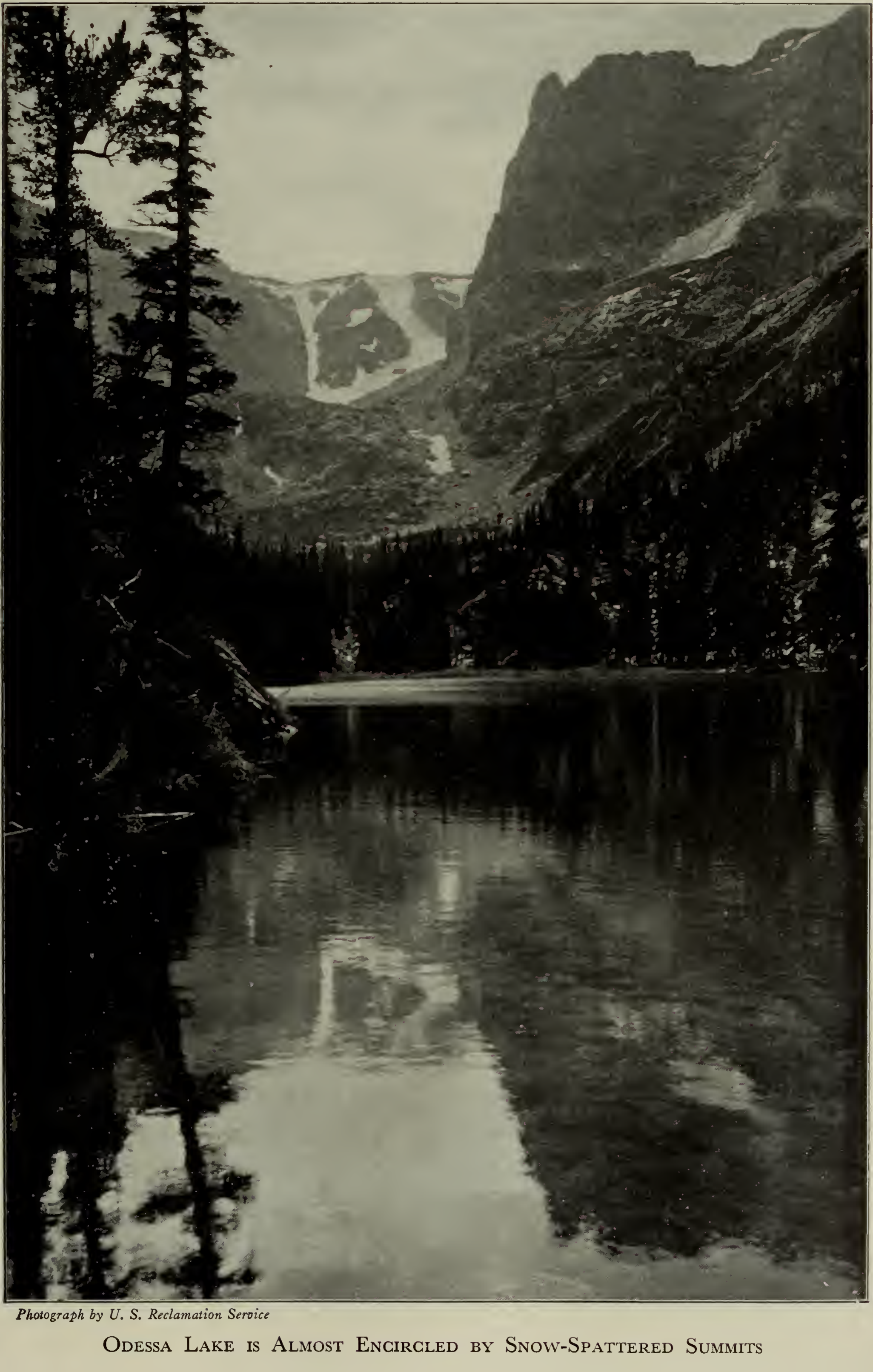
*Photograph by Wiswall Brothers*

BLUEBIRD LAKE, WILD BASIN



*Photograph by Wm. F. Ervin*

Skiing in Rocky Mountain National Park, Notchtop Mountain in Background



*Photograph by U. S. Reclamation Service*

ODESSA LAKE IS ALMOST ENCIRCLED BY SNOW-SPATTERED SUMMITS

# METROPOLIS OF BEAVERLAND

*Copyright by Wiswall Brothers, Denver*

An Aspen Thicket Trail is a Path of Delight

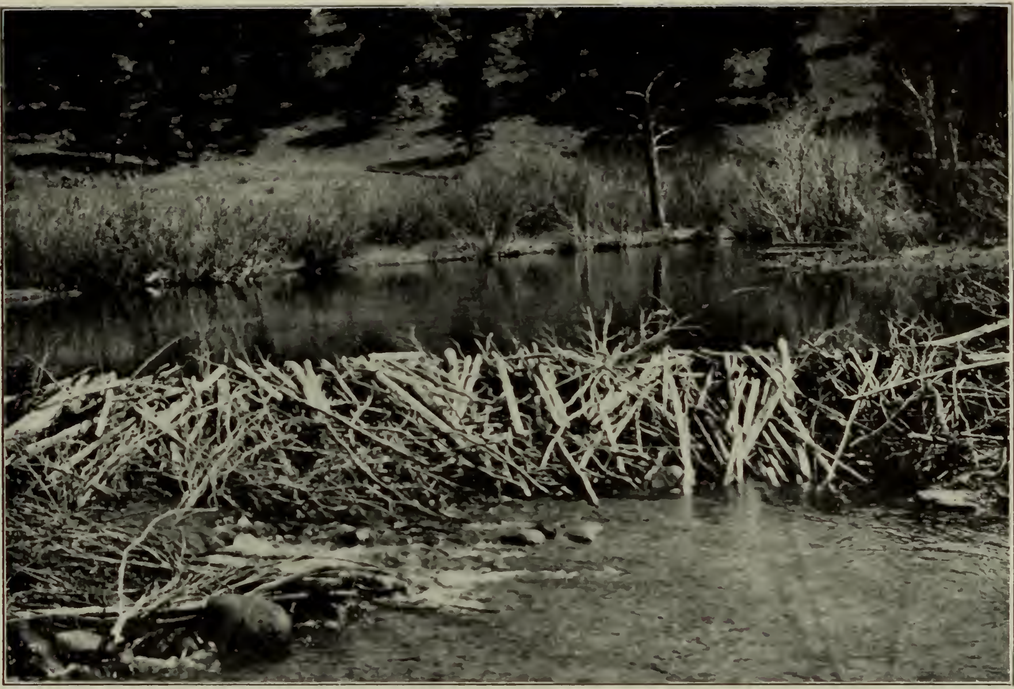
THE visitor will not forget the aspens in the Rocky Mountain National Park. Their white trunks and branches and their luxuriant bright green foliage are never out of sight. A trail through an aspen thicket is a path of delight.

Because of the unusual aspen growths, the region is the favored home of beavers, who make the tender bark their principal food. Beaver dams block countless streams and beaver houses emerge from the still ponds above. In some retired spots the engineering feats of generations of beaver families may be traced in all their considerable range.

Nowhere is the picturesqueness of timber line more quickly and more easily seen. A horse after early breakfast, a steep mountain trail, an hour of unique enjoyment, and one may be back for late luncheon.

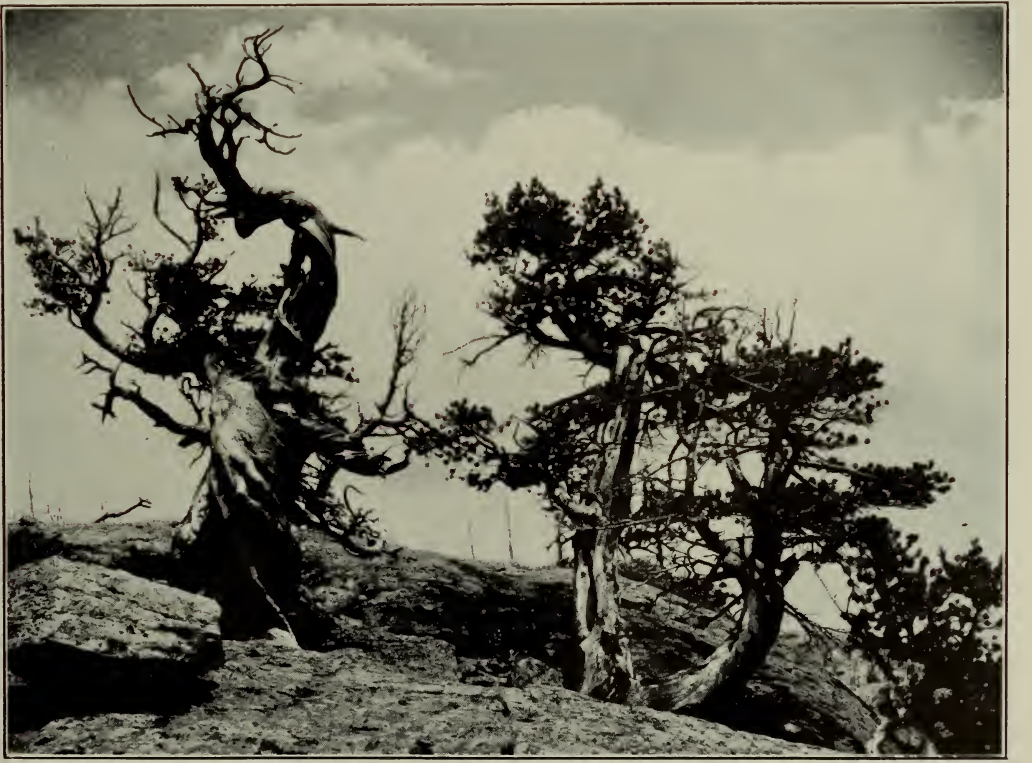
Eleven thousand feet up, the winter struggles between trees and icy gales are grotesquely exhibited.

The first sight of luxuriant Engelmann spruces creeping closely upon the ground instead of rising a hundred and fifty feet straight and true as masts is not soon forgotten. Many stems strong enough to partly defy the winters' gales grow bent in half circles. Others, starting straight in shelter of some large rock, bend at right angles where they emerge above it. Many succeed in lifting their trunks but not in growing branches except in their lee, thus suggesting great evergreen dust brushes.



*Photograph by Enos Mills*

BEAVER DAMS BLOCK COUNTLESS STREAMS



*Photograph by F. J. Francis*

WIND-TWISTED TREES AT TIMBER LINE

*Photograph by U. S. Reclamation Service*

The Stanley Hotel and Manor

# EASY TO REACH AND TO SEE

THE accessibility of the Rocky Mountain National Park is apparent by a glance at any map. Denver is less than thirty hours from St. Louis and Chicago, two days only from New York. Four hours from Denver will put you in Estes Park.

Once there, comfortable in one of its many hotels of varying range of tariff, and the summits and the gorges of this mountain-top paradise resolve themselves into a choice between foot and horseback.

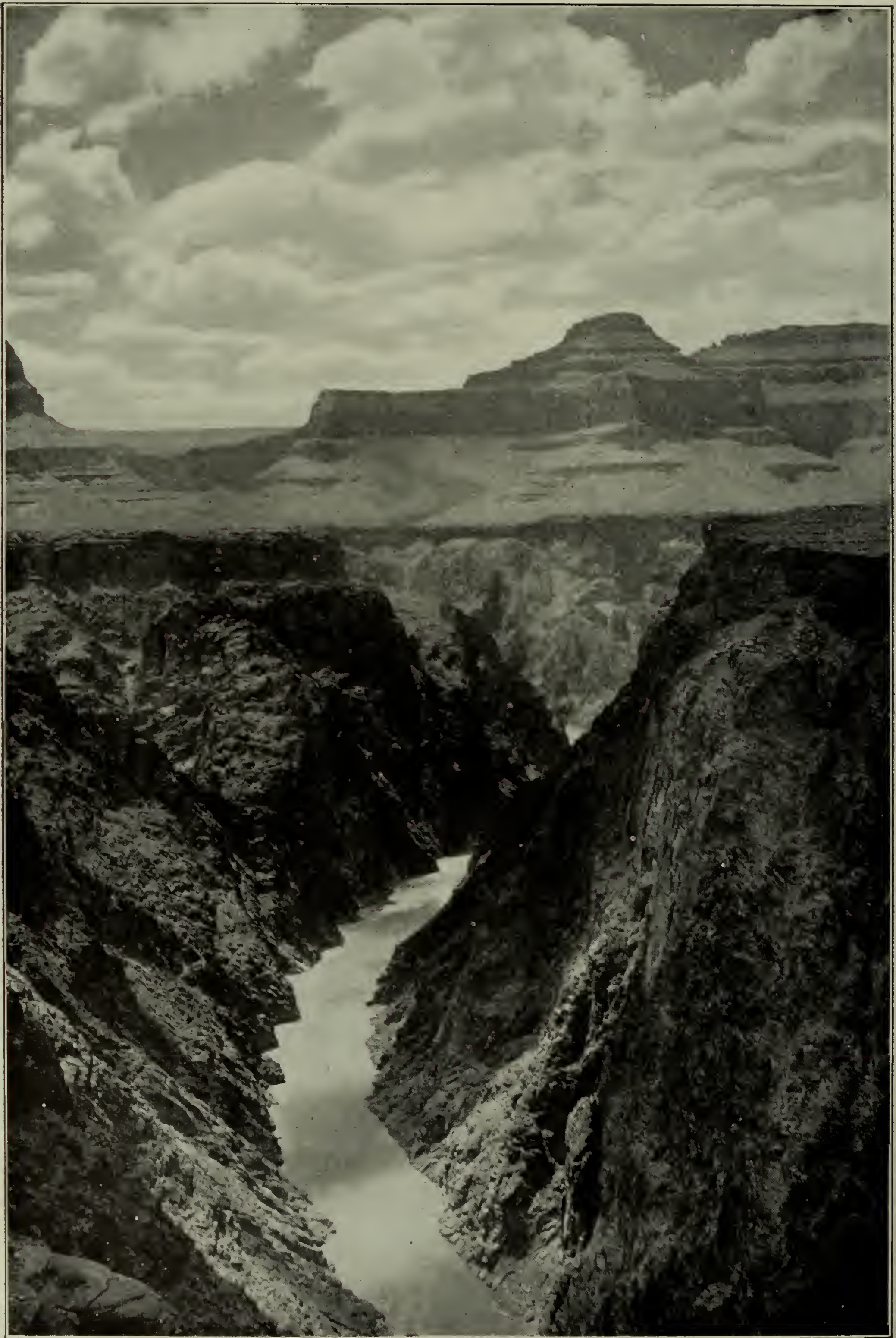
There are also a few most comfortable houses and several somewhat primitive camps within the park's boundaries at the very foot of its noblest scenery.

*Photograph by F. P. Clatworthy*

Grand Lake

"By Far the Most Sublime of All Earthly Spectacles" —Charles Dudley Warner

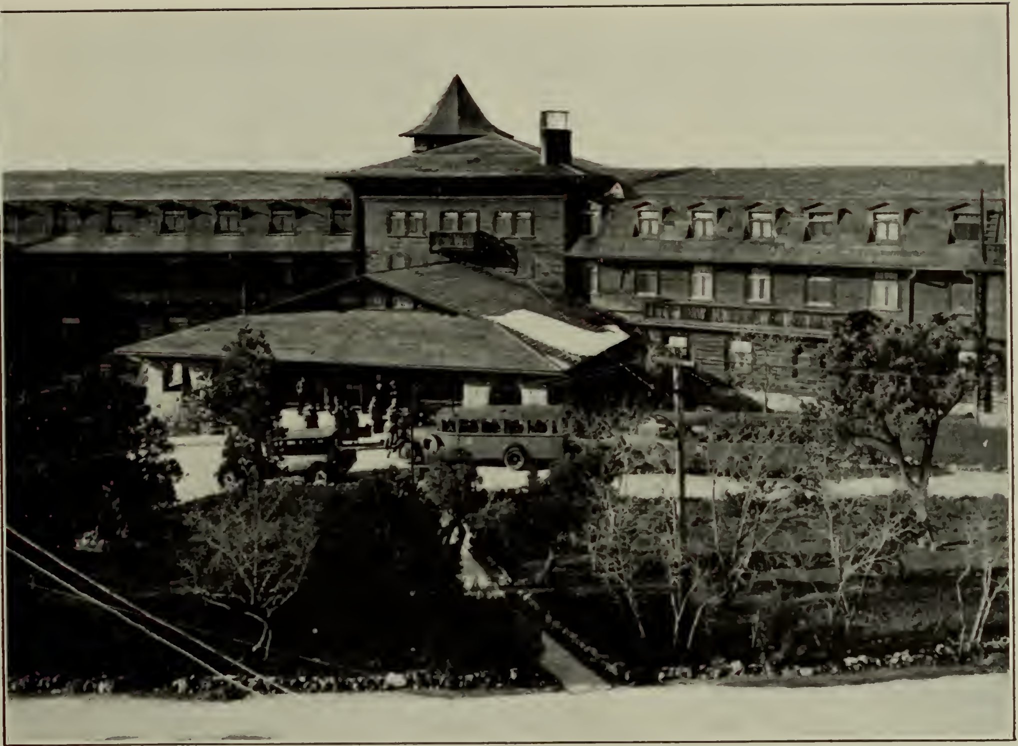
# GRAND CANYON NATIONAL PARK



*Photograph by George R. King*

"IT IS BEYOND COMPARISON—BEYOND DESCRIPTION; ABSOLUTELY UNPARALLELED THROUGHOUT THE WIDE WORLD"

—THEODORE ROOSEVELT



*Photograph by Fred Harvey*

LEAVING EL TOVAR FOR A SCENIC TRIP

# COLOSSUS OF CANYONS

MORE mysterious in its depth than the Himalayas in their height," writes Professor John C. Van Dyke, " the Grand Canyon remains not the eighth but the first wonder of the world. There is nothing like it."

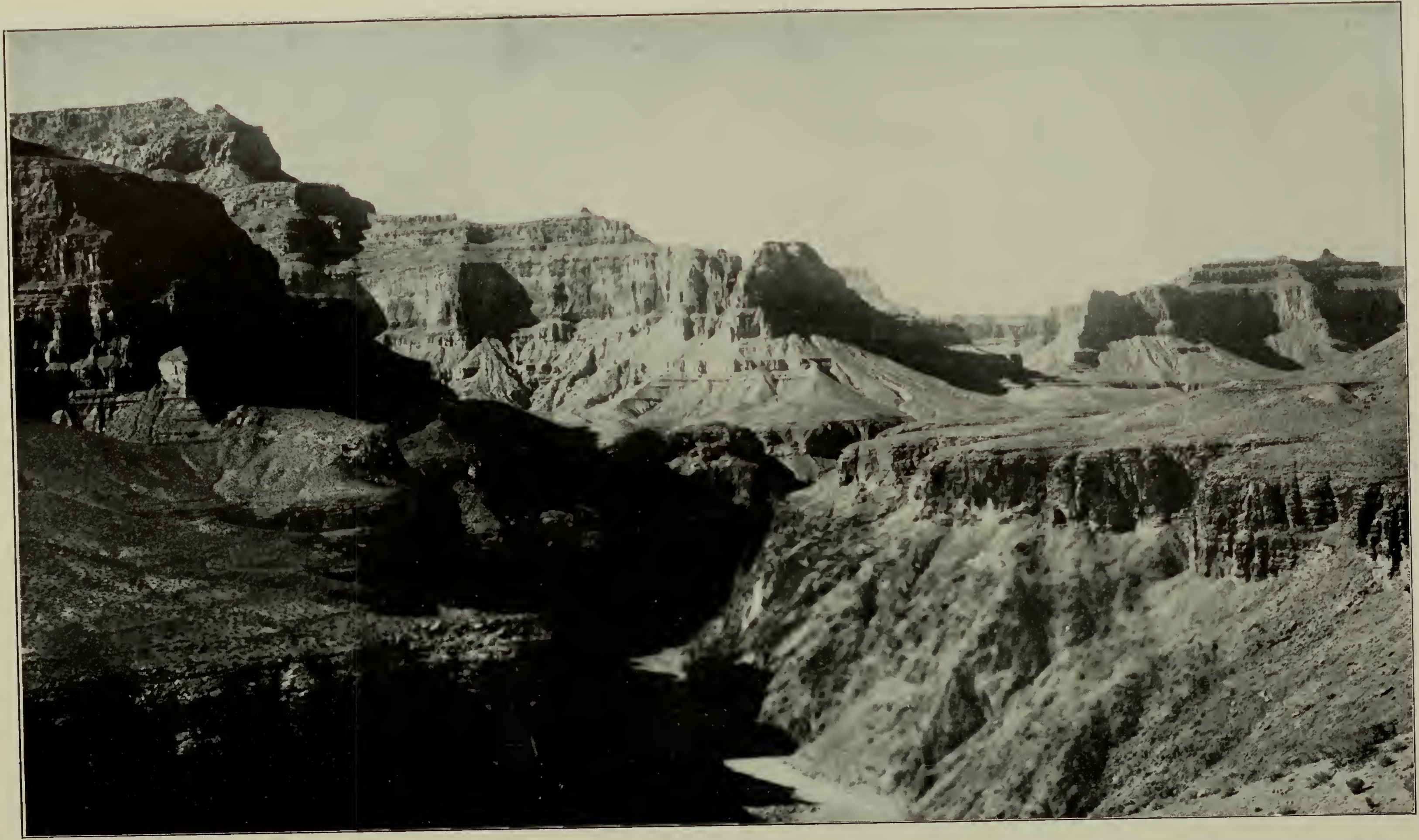
Even the most superficial description of this enormous spectacle may not be put in words. The wanderer upon the rim overlooks a thousand square miles of pyramids and minarets carved from the painted depths. Many miles away and more than a mile below the level of his feet he sees a tiny silver thread which he knows is the giant Colorado.

He is numbed by the spectacle. At first he can not comprehend it. There s no measure, nothing which the eye can grasp, the mind fathom.

It may be hours before he can even slightly adjust himself to the titanic spectacle, before it ceases to be utter chaos; and not until then does he begin o exclaim in rapture.

And he never wholly adjusts himself, for with dawning appreciation comes growing wonder. Comprehension lies always just beyond his reach.

The Colorado River is formed by the confluence of the Grand and the Green Rivers. Together they gather the waters of three hundred thousand square miles. Their many canyons reach this magnificent climax in northern Arizona. The Grand Canyon became a national park in February, 1919.



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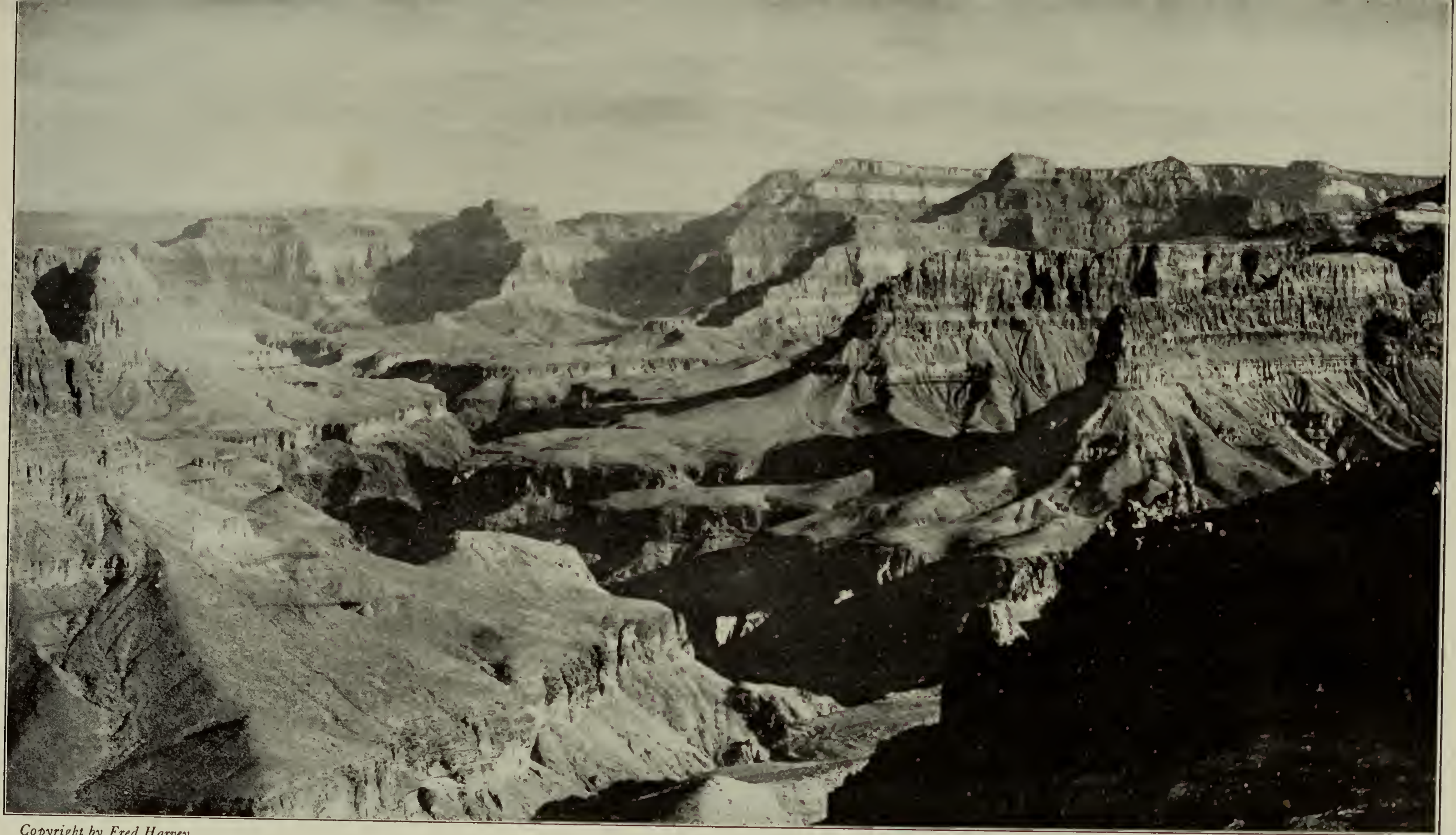
"A Pageant of Ghastly Desolation and Yet of Frightful Vitality, Such as Neither Dante nor Milton in Their Most Sublime Conceptions Ever Even Approached"

—William Winter



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"A GIGANTIC STATEMENT FOR EVEN NATURE TO MAKE ALL IN ONE MIGHTY STONE WORD. WILDNESS SO GODFUL, COSMIC, PRIMEVAL, BESTOWS A NEW SENSE OF EARTH'S BEAUTY AND SIZE"

—JOHN MUIR

*Photograph by Fred Harvey*

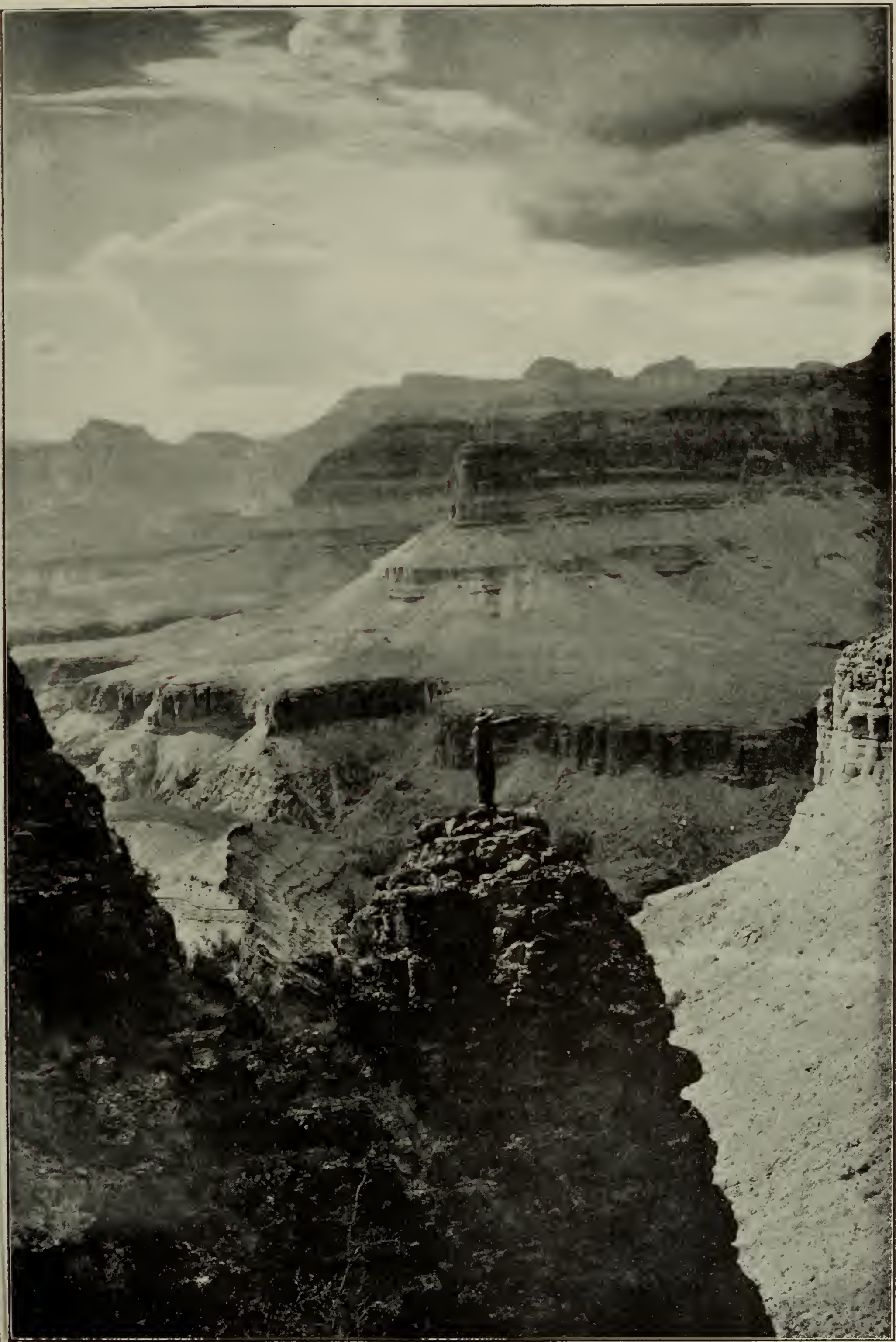
THE RIM ROAD AFFORDS MANY GLORIOUS VIEWS

# BY SUNSET AND MOONRISE

"WHEN the light falls into it, harsh, direct, and searching," writes Hamlin Garland, "it is great, but not beautiful. The lines are chaotic, disturbing—but wait! The clouds and the sunset, the moonrise and the storm, will transform it into a splendor no mountain range can surpass. Peaks will shift and glow, walls darken, crags take fire, and gray-green mesas, dimly seen, take on the gleam of opalescent lakes of mountain water."

*Copyright by Fred Harvey*

HERMIT'S REST, NEAR THE HEAD OF THE HERMIT'S TRAIL TO THE RIVER



*Photograph by U. S. Reclamation Service*

"Is Any Fifty Miles of Mother Earth as Fearful, or Any Part as Fearful, as Full of Glory, as Full of God?" —Joaquin Miller

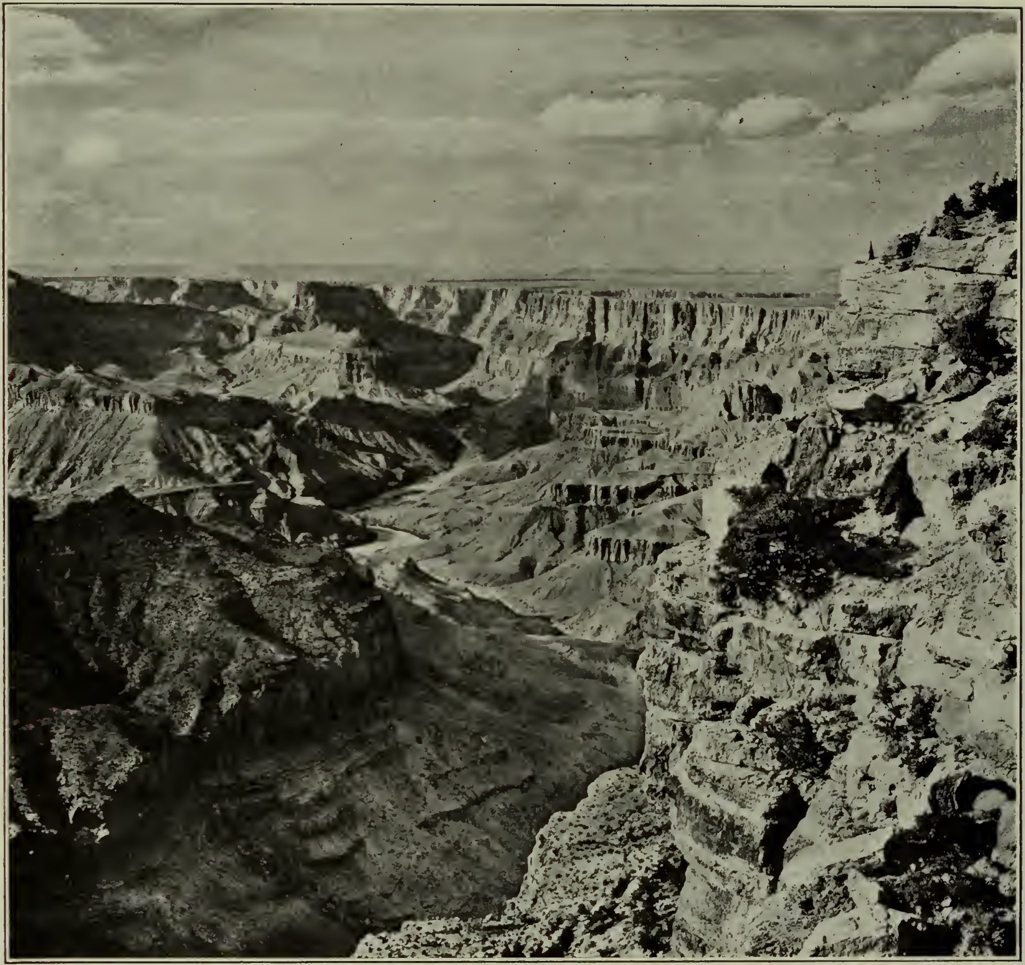
Copyright by Fred Harvey

Sunset from

" Peaks Will Shift and Glow, Walls Darken, Crags Take Fire, and Gray-Green

. Point

s, Dimly Seen, Take on the Gleam of Opalescent Lakes" —Hamlin Garland



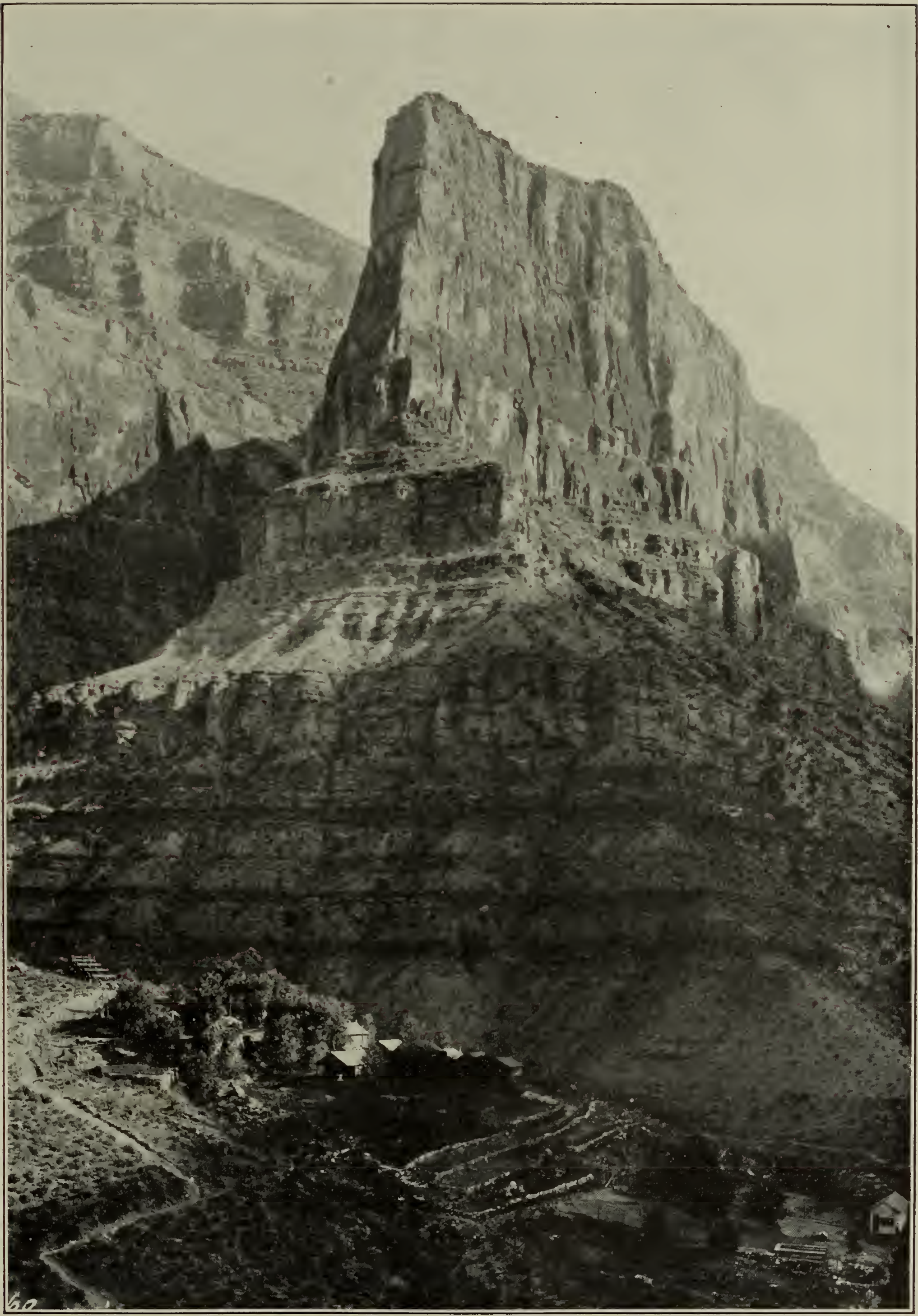
*Photograph by Fred Harvey*

View From Lipan Point, Overlooking Confluence of Little Colorado River and a Section of the Painted Desert

# PAINTED IN MAGIC COLORS

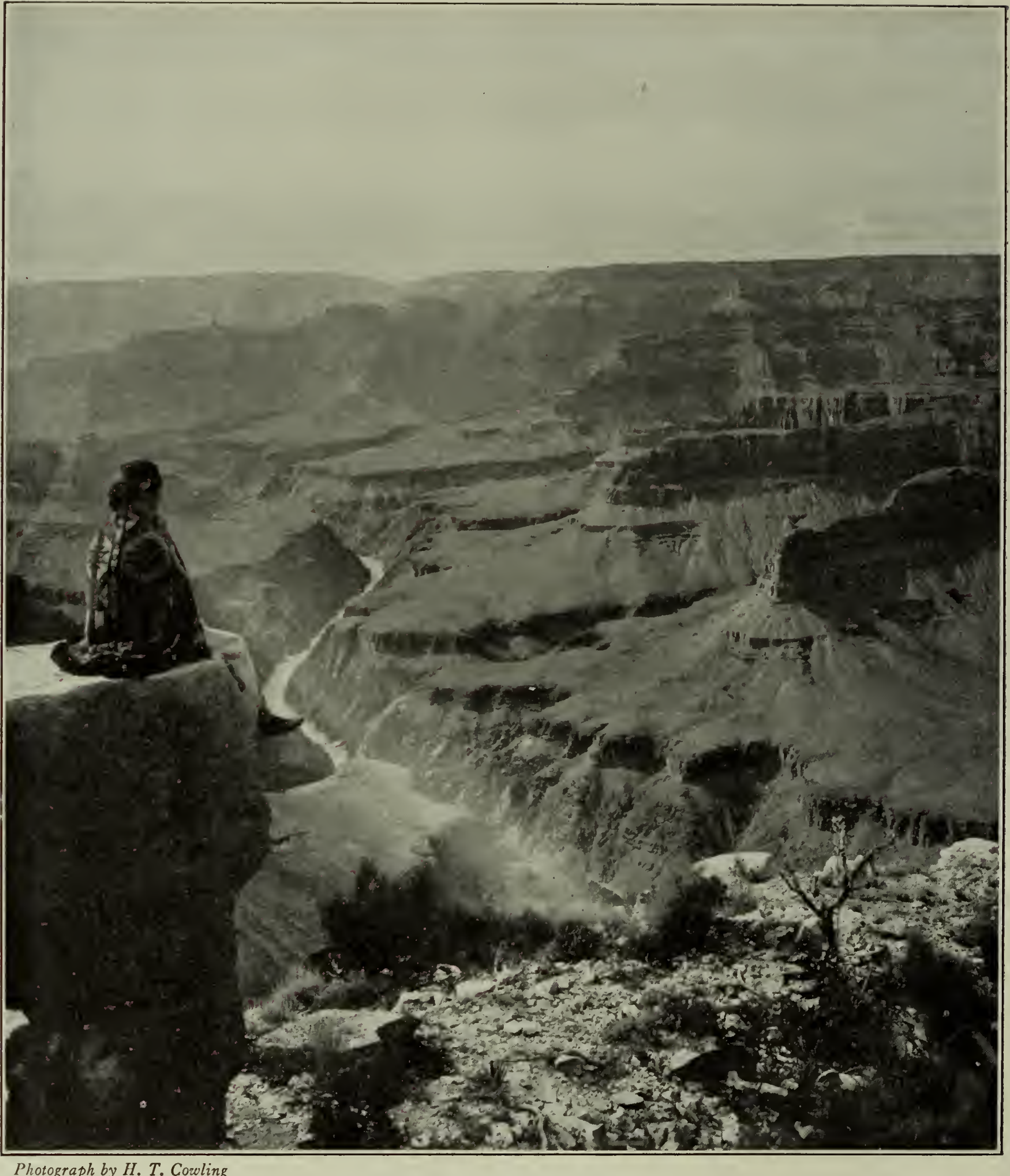
THE blues and the grays and the mauves and the reds are second in glory only to the canyon's size and sculpture. The colors change with every changing hour. The morning and the evening shadows play magicians' tricks.

" It seems like a gigantic statement for even Nature to make all in one mighty stone word," writes John Muir. " Wildness so Godful, cosmic, primeval, bestows a new sense of earth's beauty and size. . . . But the colors, the living, rejoicing colors, chanting morning and evening in chorus to heaven! Whose brush or pencil, however lovingly inspired, can give us these? In the supreme flaming glory of sunset the whole canyon is transfigured, as if the life and light of centuries of sunshine stored up in the rocks was now being poured forth as from one glorious fountain, flooding both earth and sky."



*Photograph by Fred Harvey*

Near the Bottom of the Canyon, Showing Hermit Camp at the Foot of a Lofty Monument



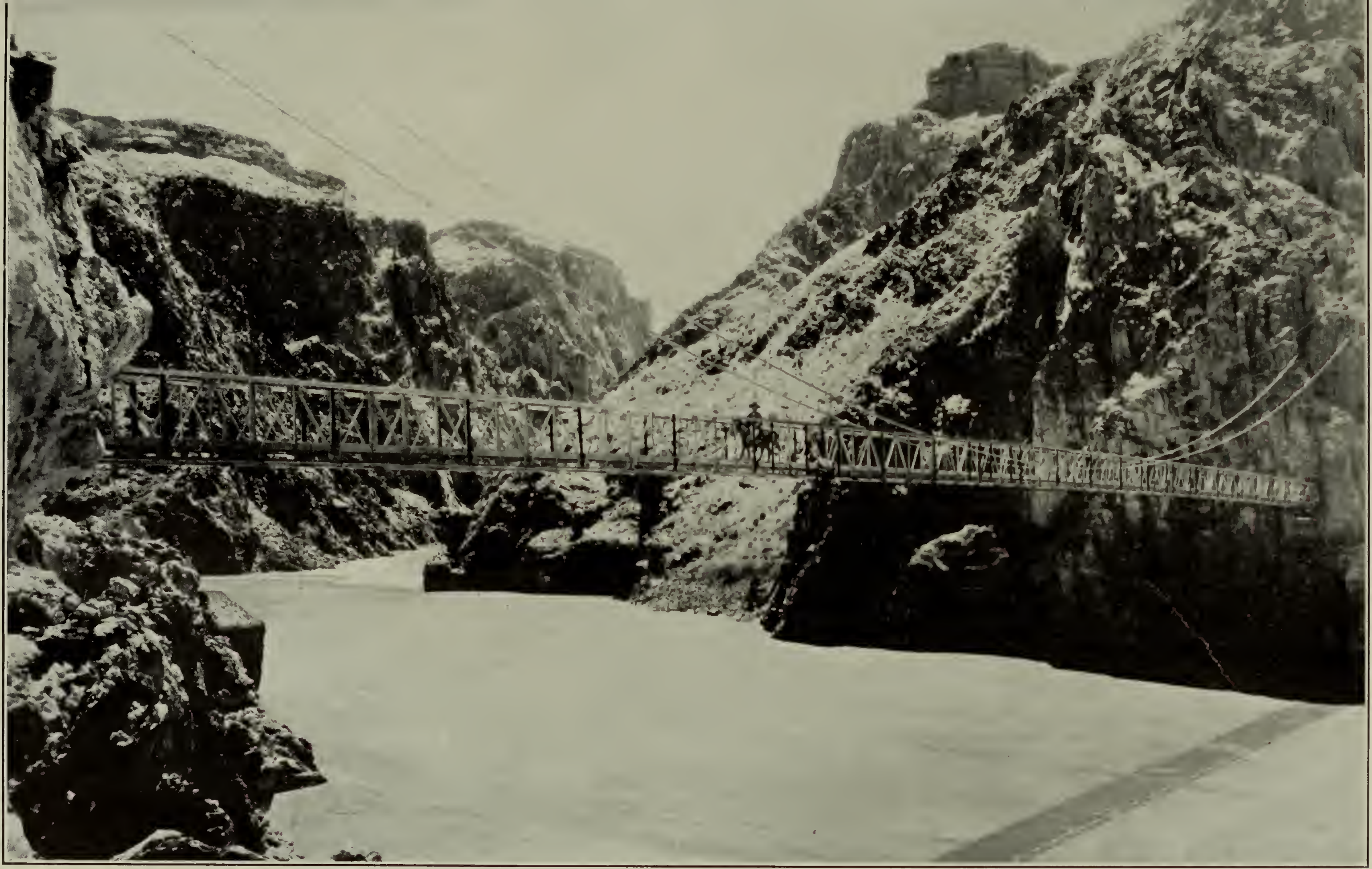
*Photograph by H. T. Cowling*

THE PROFOUND ABYSS

# ROMANTIC INDIAN LEGEND

THE Indians believed the Grand Canyon the road to heaven. A great chief mourned the death of his wife. To him came the god Ta-vwoats and offered to prove that his wife was in a happier land by taking him there to look upon her happiness. Ta-vwoats then made a trail through the protecting mountains and led the chief to the happy land. Thus was created the canyon gorge of the Colorado.

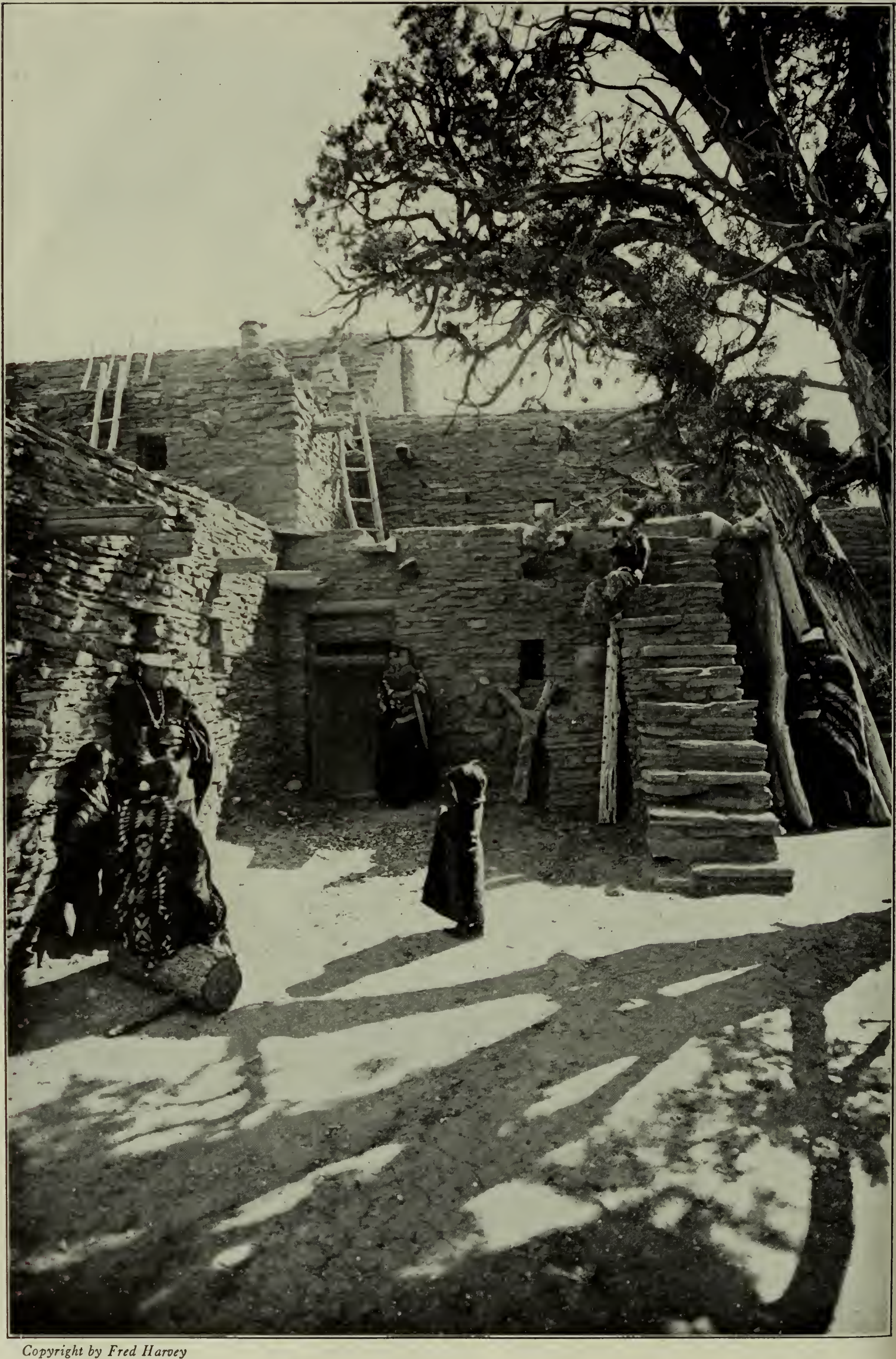
On their return, lest the unworthy should find this happy land, Ta-vwoats rolled through the trail a wild, surging river. Thus was created the Colorado.



*Photograph by Fred Harvey*

Kaibab Suspension Bridge

Built by the National Park Service to span the Colorado River at the foot of the Kaibab Trail



*Copyright by Fred Harvey*

Hopi House at El Tovar, Reproduced from an Ancient Hopi Community Dwelling

*Photograph by Fred Harvey*

WHEN CLOUDS AND CANYON MEET AND MERGE

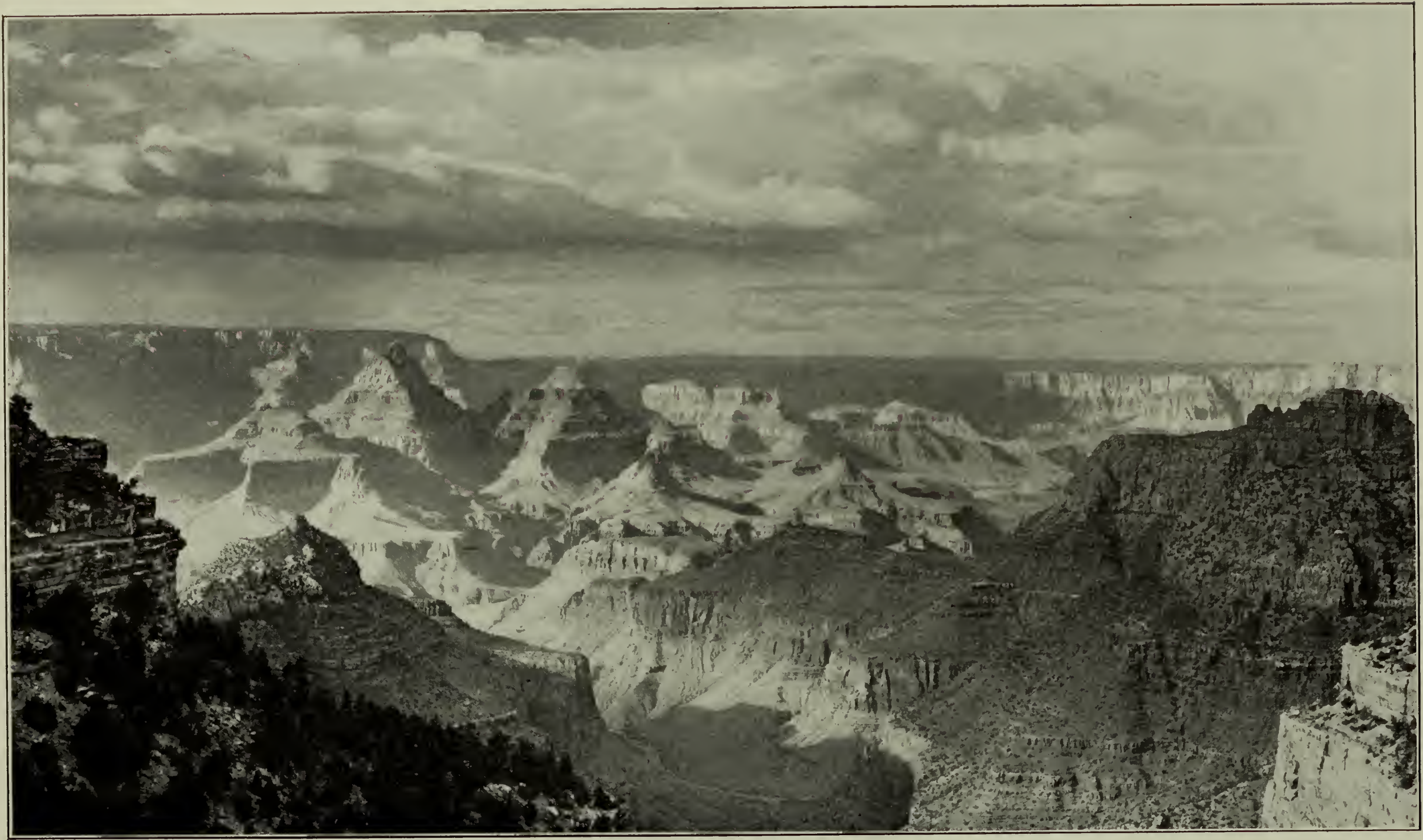
# MASTERPIECE OF EROSION

THE rain falling in the plowed field forms rivulets in the furrows. The rivulets unite in a muddy torrent in the roadside gutter. With succeeding showers the gutter wears an ever-deepening channel in the soft soil. With the passing season the gutter becomes a gully. Here and there, in places, its banks undermine and fall in. Here and there the rivulets from the field wear tiny tributary gullies. Between the breaks in the banks and the tributaries irregular masses of earth remain standing, sometimes resembling mimic cliffs, sometimes washed and worn into mimic peaks and spires.

Such roadside erosion is familiar to us all. A hundred times we have idly noted the fantastic water-carved walls and minaretted slopes of these ditches. But seldom, perhaps, have we realized that the muddy roadside ditch and the world-famous Grand Canyon of the Colorado are, from nature's standpoint, identical; that they differ only in soil and size.

The arid States of our great Southwest constitute an enormous plateau or table-land from four to eight thousand feet above sea level.

Rivers gather into a few desert water systems. The largest of these is that which, in its lower courses, has, in unnumbered ages, worn the mighty chasm of the Colorado.



*Photograph by Putnam & Valentine*

FROM GRAND VIEW

"But Wait! The Clouds and the Sunset, the Moonrise and the Storm, Will Transform It into a Splendor No Mountain Range Can Surpass" —HAMLIN GARLAND

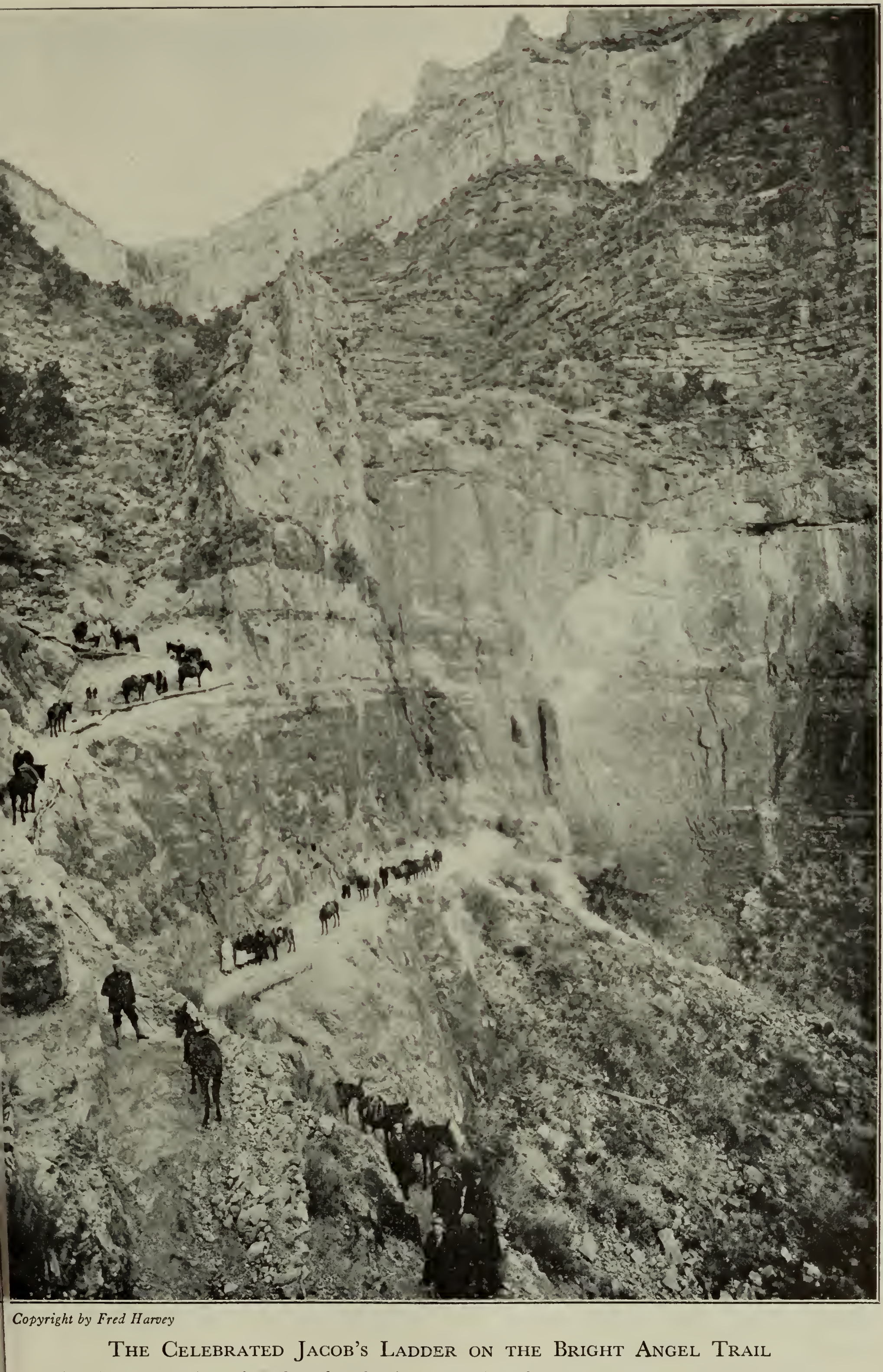
The Lifting Mists Disclose the Gorgeous Pattern of the Opposite Rim

*Photograph by U. S. Reclamation Service*

THE LOOKOUT AT THE HEAD OF THE BRIGHT ANGEL TRAIL NEAR EL TOVAR

*Photograph by Fred Harvey*

WAITING FOR THE SIGNAL TO START DOWN BRIGHT ANGEL TRAIL
One may descend to the river's edge and back in one day by this trail



*Copyright by Fred Harvey*

THE CELEBRATED JACOB'S LADDER ON THE BRIGHT ANGEL TRAIL

The photograph shows how broad and safe are the Grand Canyon trails. There is no danger in the descent

# POWELL'S GREAT ADVENTURE

THE Grand Canyon was the culminating scene of one of the most stirring adventures in the history of American exploration.

For hundreds of miles the Colorado and its tributaries form a vast network of mighty chasms which few had ventured even to enter. Of the Grand Canyon, deepest and hugest of all, tales were current of whirlpools, of hundreds of miles of underground passage, and of giant falls whose roaring music could be heard on distant mountain summits.

The Indians feared it. Even the hardiest of frontiersmen refused it.

It remained for a geologist and a school-teacher, a one-armed veteran of the Civil War, John Wesley Powell, afterwards director of the United States Geological Survey, to dare and to accomplish.

This was in 1869. Nine men accompanied him in four boats.

There proved to be no impassable whirlpools in the Grand Canyon, no underground passages, and no cataracts. But the trip was hazardous in the extreme. The adventurers faced the unknown at every bend, daily—sometimes several times daily—embarking upon swift rapids without guessing upon what rocks or in what great falls they might terminate. Continually they upset. They were unable to build fires sometimes for days at a stretch.

Three men deserted, hoping to climb the walls, and were killed by Indians—and this happened the very day before Major Powell and his faithful half dozen floated clear of the Grand Canyon into safety.

*Photograph by Zion Studio*

GRAND CANYON LODGE OVERLOOKING THE CANYON FROM THE NORTH RIM

*Photograph by El Tovar Studio*

MEMORIAL ERECTED BY THE DEPARTMENT OF THE INTERIOR TO MAJOR JOHN WESLEY POWELL. IT STANDS ON THE RIM AT SENTINEL POINT

# EASY TO REACH AND TO SEE

IT IS possible to get a glimpse of the Grand Canyon by lengthening your transcontinental trip one day, but this day must be spent either on the rim or in one hasty rush down the Bright Angel Trail to the river's edge; one can not do both the same day. Two arduous days, therefore, will give you a rapid glance at the general features. Three days will enable you to substitute the newer Kaibab Trail, with a night in the canyon, for the Bright Angel Trail. Four or five days will enable you to *see* the Grand Canyon; but after you see it you will want to live with it awhile.

The canyon should be seen first from the rim. Hours, days, may be spent in emotional contemplation of this vast abyss. Navajo Point, Grand View, Shoshone Point, El Tovar, Hopi Point, Sentinel Point, Pima Point, Yavapai Point, the Hermit Rim—these are a few only of many spots of inspiration.

An altogether different experience is the descent into the abyss. This is done on muleback over trails which zigzag steeply but safely down the cliffs.

The hotels, camps, and facilities for getting around are admirable. Your sleeper brings you to the very rim of the canyon.

*Courtesy Union Pacific System*

THE SUPERB KAIBAB FOREST

# THE NORTH RIM

THERE is a remarkable difference between the north and south rims. The north rim, a thousand feet higher, is a colder country, clothed with lusty forests of spruce, pine, fir, and quaking aspen, with no suggestion of the desert.

Deer are plentiful on the north rim, and hundreds may be counted on an evening's ride through the Kaibab Forest. A portion of this forest was added to the national park in 1927.

The forest floor is amazingly clean, with little down timber or shrubby growths. Here and there the dense forest opens out to delightful parklike glades. These are especially the haunt of the deer.

*Courtesy Union Pacific System*

View from Bright Angel Point on the North Rim of the Canyon

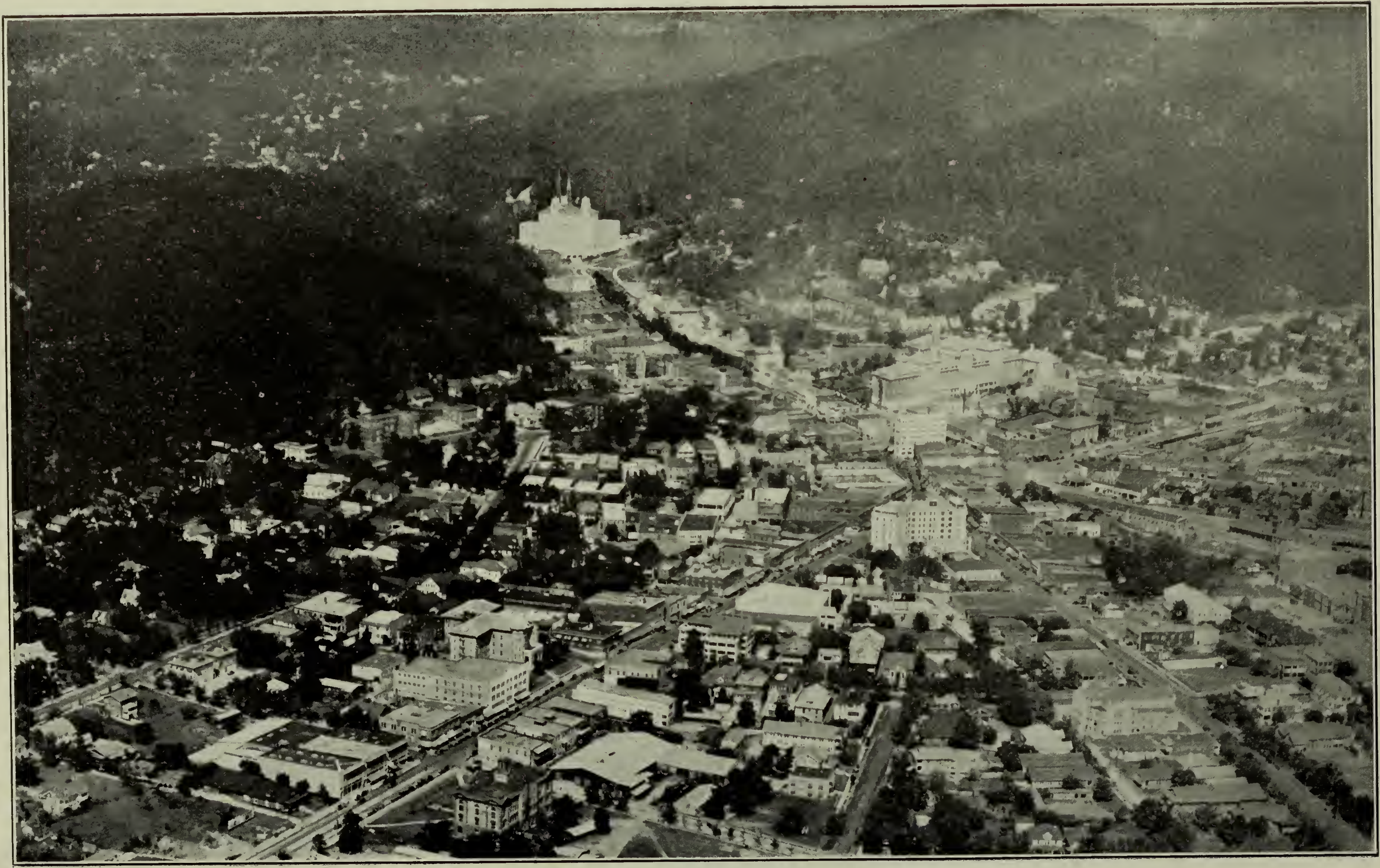
# SPECTACULAR VIEWS FROM NORTH RIM

THE views from the north rim are markedly different from those obtained from the south side of the canyon. From the north one may see close at hand the vast temples which form the background of the south rim's view. One looks down upon them, and on beyond to the distant canyon floor and its gaping gorge, which from most points hides the river from view. Beyond these the south rim rises like a great streaked flat wall. Still farther beyond, miles away, may be seen the dim blue San Francisco Peaks.

It is a spectacle full of sublimity and charm.

Bright Angel Point, extending out in the mighty gorge, affords glorious views. Near this point are located interesting and comfortable lodge accommodations.

From Bright Angel Point the canyon drops away nearly six thousand feet and at this point the gorge is twelve miles across. Excellent trails connect the two rims, and a muleback trip from one side to the other is a never-to-be-forgotten experience.



General View of Hot Springs

HOT SPRINGS NATIONAL PARK
LASSEN VOLCANIC NATIONAL PARK
MOUNT McKINLEY NATIONAL PARK
HAWAII NATIONAL PARK
ZION NATIONAL PARK
BRYCE CANYON NATIONAL PARK
GRAND TETON NATIONAL PARK
CARLSBAD CAVERNS NATIONAL PARK
MID-CONTINENT PARKS
ACADIA NATIONAL PARK
THE NATIONAL MONUMENTS

Entrance to the Hot Springs National Park

# HOT SPRINGS NATIONAL PARK

FROM the slopes of a picturesque wooded hill among the wild and romantic Ouachita Mountains of Arkansas flow springs of hot water used for many generations in the belief that they would alleviate certain bodily ills. Tradition has it that their curative properties were prized by the Indians before the Spanish invasion. The hot springs were probably visited in 1541 by De Soto, who died the following spring on the Mississippi about a hundred miles away. It is tradition that the warring Indian tribes suspended all hostilities at these springs, whose neighborhood they called "The Land of Peace." Government analyses of the waters disclose more than twenty chemical constituents.

The hot springs were reserved for national use in 1832, forty years before the wonders of the Yellowstone first inspired Congress with the idea that scenery was a national asset deserving of preservation for the use and enjoyment of succeeding generations. No esthetic consideration was involved in this early act of national conservation. The motive was to retain these unique waters in public possession to be available to all persons for all time at a nominal cost.

Hot Springs Mountain, from whose sides flow the hot waters, is about fifty miles west by south from Little Rock.

Swimming Pool in Auto Camp

Shelter House and Trail Above Iron Spring, Hot Springs Mountain

One of the Best Golf Courses in the South

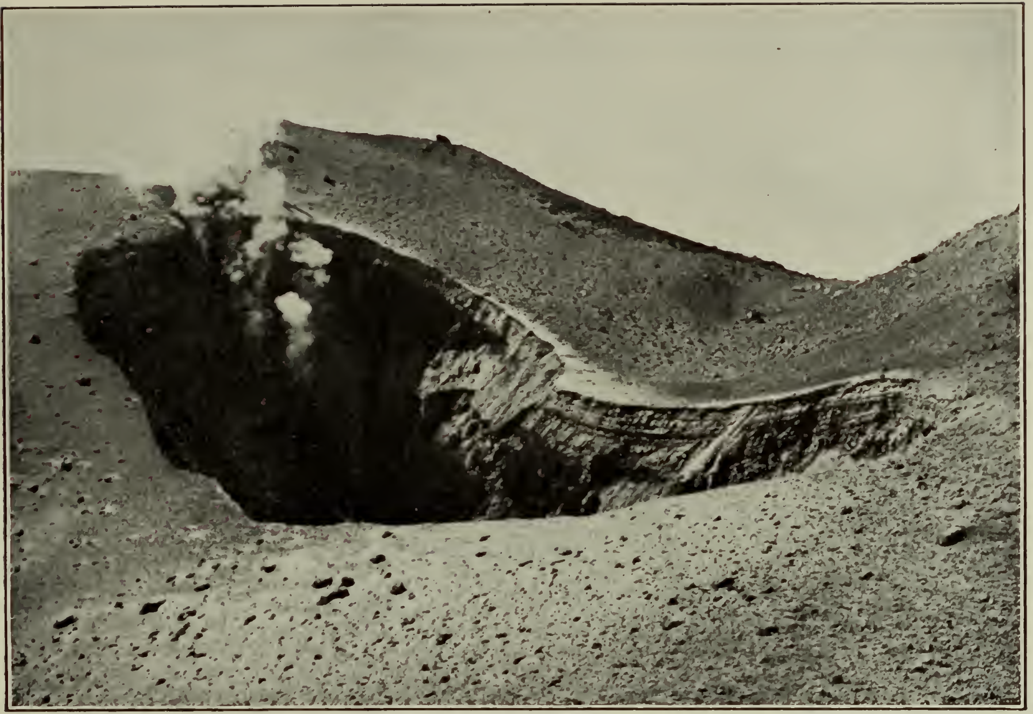
# REST, RECUPERATION, AND RECREATION

HOT SPRINGS has much besides its waters to attract and hold the visitor. It has one of the best and most interesting golf courses in the South. The surrounding country is romantically beautiful. Many miles of woodland trail lead the walker and the horseback rider through pine-scented glades and glens and over mountain tops of unusual charm. There are boating and fishing for the fisherman, tennis for the young folks, ostrich and alligator farms for the curious, and the gayeties of life in big hotels for all.

Hot Springs is not merely a winter resort. Climate and conditions are delightful the year around, as increasing throngs are rapidly discovering. It is above all a place for rest and recuperation. More and more winter visitors are remaining through April and May. But those who remain after March should bring summer clothing, as the temperature then ranges from sixty-five to eighty-five degrees.

The park contains nine hundred and twenty-seven acres, and included in this tract are all the forty-four hot springs. These springs are grouped about the base of Hot Springs Mountain. In front of the springs is Magnolia Row, containing nine complete and luxurious bathhouses. Scattered about the city are ten other bathhouses, all under Government control. A Government free bathhouse and clinic is maintained for the poor and unfortunate.

There are many hotels, the largest having accommodations for a thousand guests, and several hundred boarding houses, many at very moderate prices, throughout the city. Cottages and apartments may be rented for light housekeeping. The Government maintains a picturesque automobile camp for persons who delight in camping.



*Photograph by P. J. Thompson*

CRATER OF LASSEN PEAK AFTER ERUPTION IN 1914

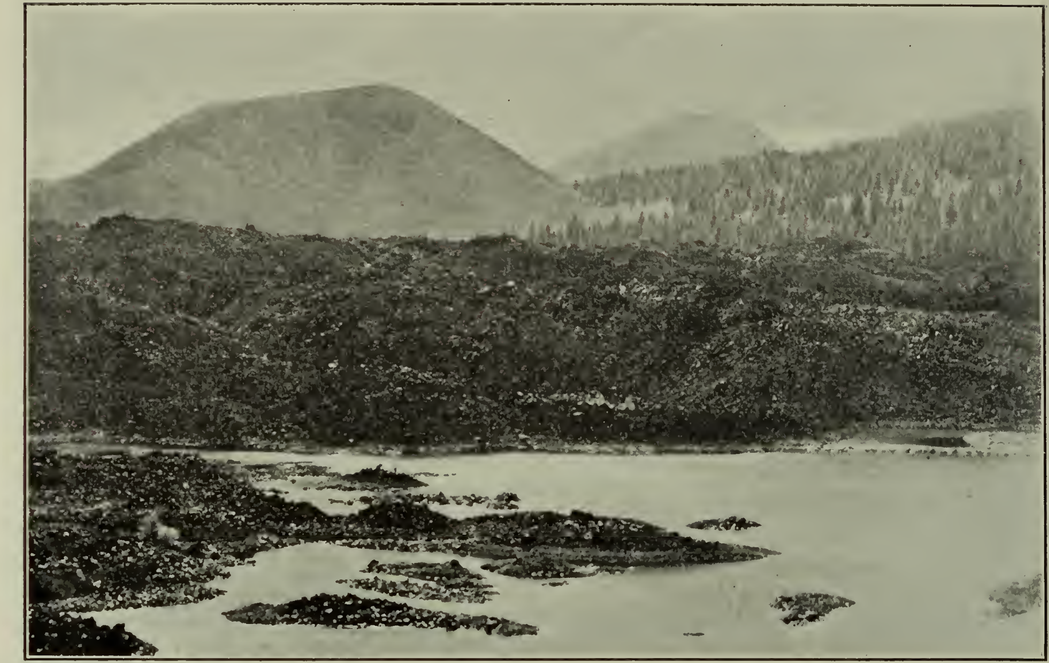
# LASSEN VOLCANIC NATIONAL PARK

ONE of the greatest fields of former volcanic activity in the world lies in the northwestern corner of the United States. Its lavas cover a quarter of a million square miles. Most of this area, however, has long since been covered by forest or other vegetation.

Of the great chain of volcanoes which stretched along the northern Pacific coast but one, Lassen Peak, remains active. The other fire monsters are dead, or at least in an age-long sleep, ice covered and apparently tamed. In fact, no other volcano in this country, outside of our Territories of Hawaii and Alaska, is known to have been active in the recent past.

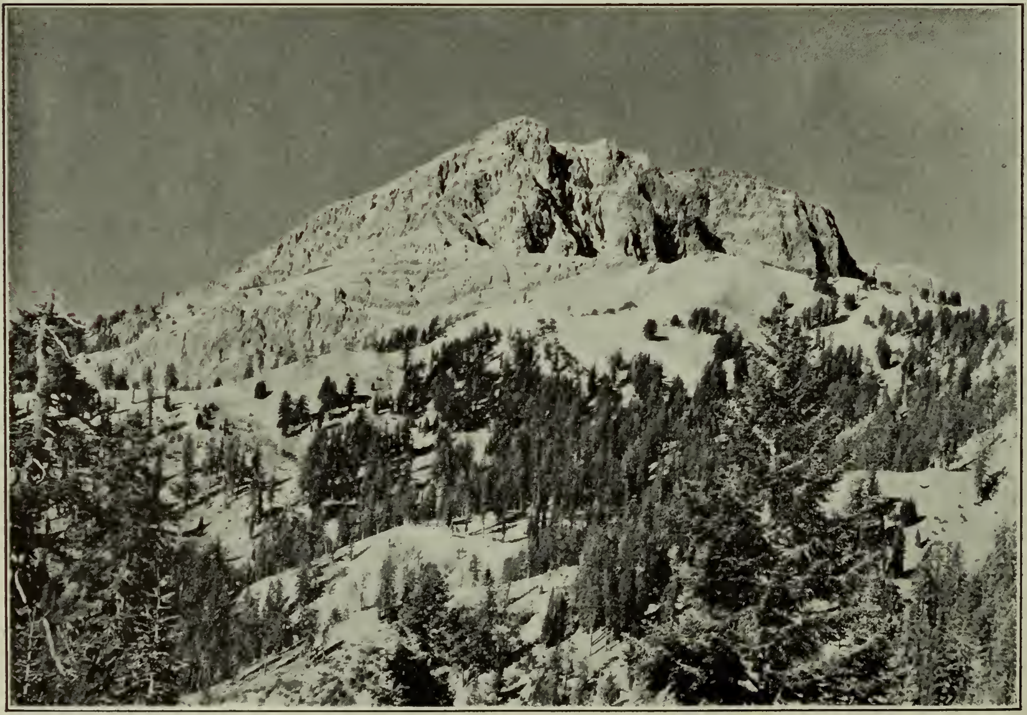
As late as 1914–1916 Lassen Peak, the most southerly of the Pacific coast chain, was in spectacular eruption. For two hundred years it too had been quiet. Then, just before the World War broke out, an explosion from its summit ushered in a new period of eruption, feeble, perhaps, when compared with its violent past, but nevertheless a magnificent spectacle.

Following this the volcano was in almost constant eruption for nearly two years. The most spectacular outburst was the superheated gas blast which rushed down the mountain and out into two valleys. For ten miles it destroyed or withered every living thing in its path. Snow fields were instantly turned to water which flooded the lower valleys in rushing tides. The pathway of this interesting phenomena to-day is known as the devastated area.



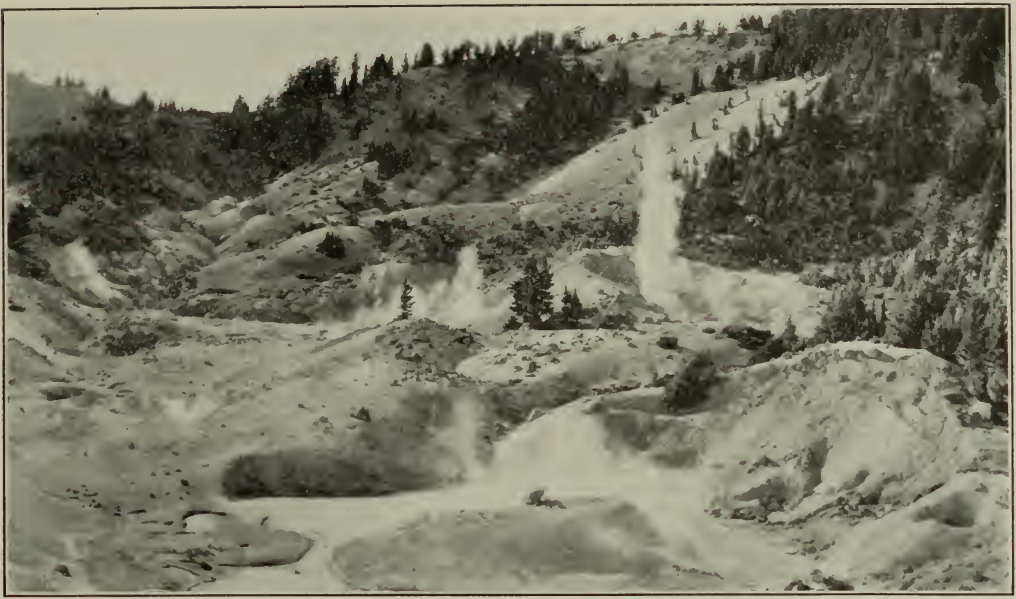
Photograph by R. H. Finch

LOOKING WEST ACROSS BUTTE LAKE AND THE CINDER CONE LAVA FLOWS



Photograph by R. H. Finch

BROKEOFF MOUNTAIN, AS SEEN FROM THE LASSEN PEAK TRAIL



Looking West Across a Portion of Bumpas Hell

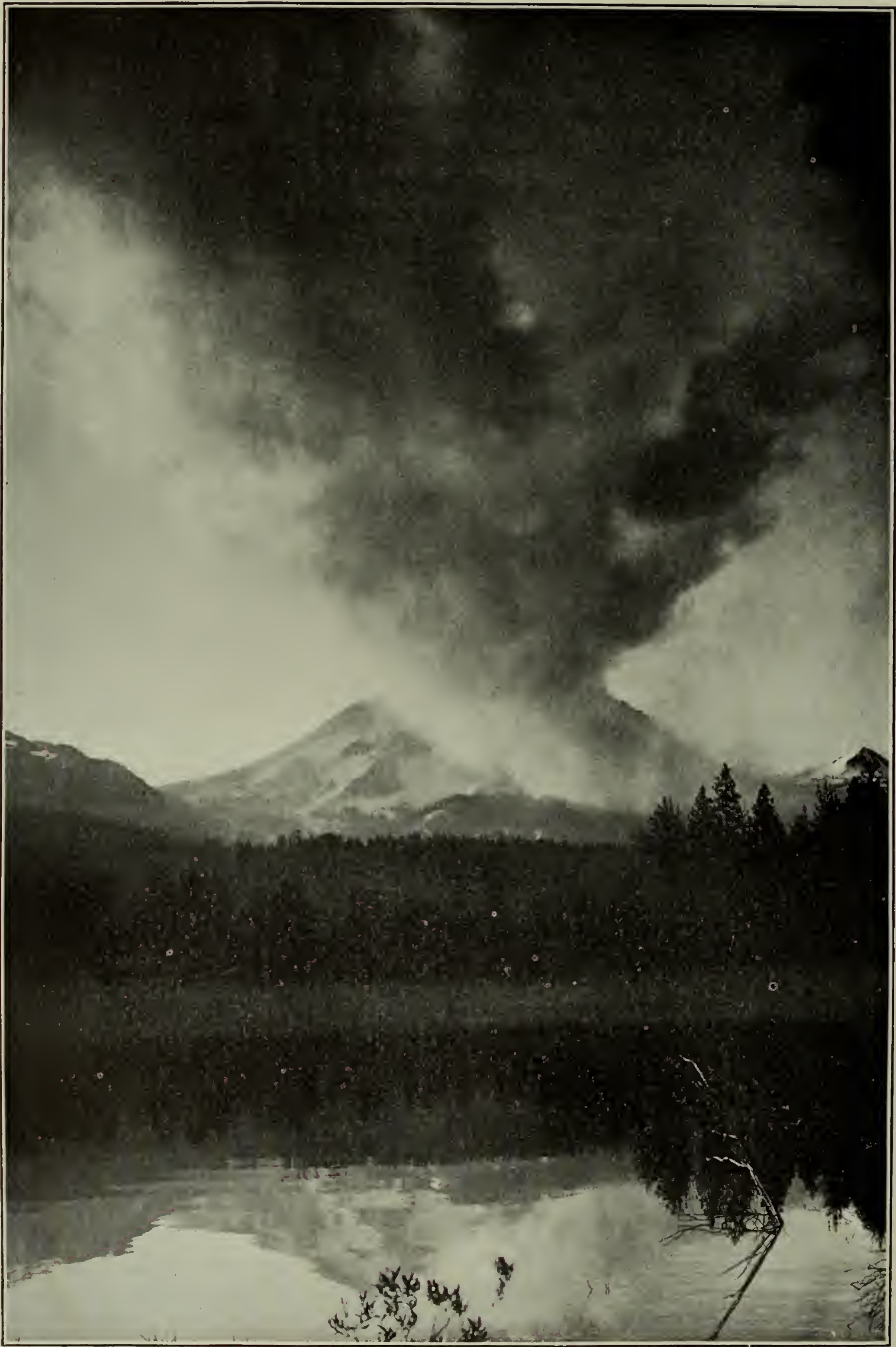
SOME TIME prior to these explosions Lassen Peak and its interesting neighbor, Cinder Cone, were included in separate national monuments. Following the latest eruptions, they were included in the Lassen Volcanic National Park.

Cinder Cone, with its fantastic lava beds and multicolored volcanic ejecta, is unusually beautiful. It is bare of vegetation and gives the impression of having been so recently formed that the heat of creation should still be present. Brokeoff Mountain is another striking peak.

The hot-water phenomena of the region is unusually interesting. Boiling Springs Lake is a striking spectacle—a seething, simmering caldron with a shore line of about two thousand feet. Encircling it is a primeval forest of conifers.

The Devils Kitchen, a half mile of canyon between volcanic rock walls, is traversed by a lovely stream, which contrasts strongly with the incipient geysers, sputtering hot spring, paint pots, and vaporing fumaroles which suggested its name. Bumpas Hell is another weird solfataric area.

Volcanic phenomena, however, are by no means the sole attraction of the park. There are splendid primeval forests, in which yellow and Jeffrey pine predominate. Its stand of western black hemlock was characterized by John Muir as the loveliest he ever found. Through the forest curtain the silvery sheen and shimmer of innumerable alpine lakes greets the eye, affording a picture of rare beauty.



*Photograph by W. S. Valentine*

LASSEN PEAK IN ERUPTION, JULY, 1914

# MOUNT McKINLEY NATIONAL PARK

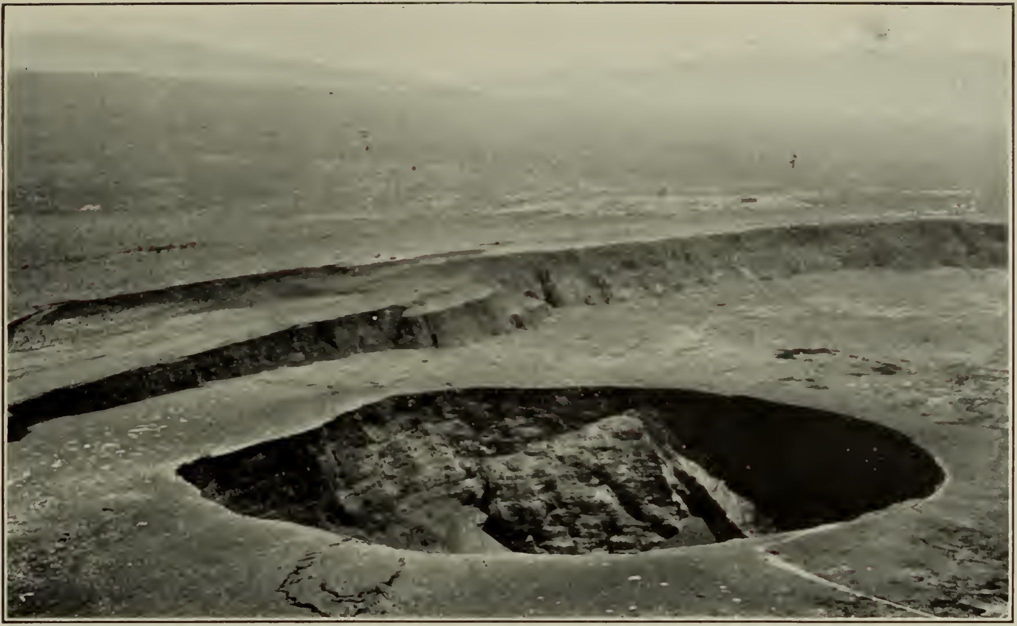
## GIANT OF MOUNTAINS

MOUNT McKINLEY, a national park since 1917, is the loftiest mountain in America. It towers twenty thousand three hundred feet above tide. Its gigantic ice-covered bulk rises more than seventeen thousand feet above the eyes of the observer. It is ice plated fourteen thousand feet below its glistening summit.

This enormous mass is the climax of the great Alaskan Range, which extends, roughly, east and west across southeast central Alaska.

The reservation contains over twenty-six hundred square miles. Its northern slopes, which overlook the Tanana watershed with its gold-mining industry, are broad valleys inhabited by enormous herds of caribou. Its southern plateau is a winter wilderness through which glaciers of great length and enormous bulk flow into the valleys of the south. In this national park, which the railroad built by the Government into the Alaskan interior has opened to the public, America possesses alpine scenery upon a titantic scale. In fact, it matches the Himalayas; as a spectacle Mount McKinley even excels their loftiest peaks, for the altitude of the valleys from which the Himalayas are viewed exceeds by many thousand feet that of the plains from which the awed visitor looks up to McKinley's towering height.

Mount McKinley, Loftiest Mountain in North America



*Photograph by U. S. Army Air Corps*

THE FIRE-PIT HALEMAUMAU WITHIN KILAUEA CRATER

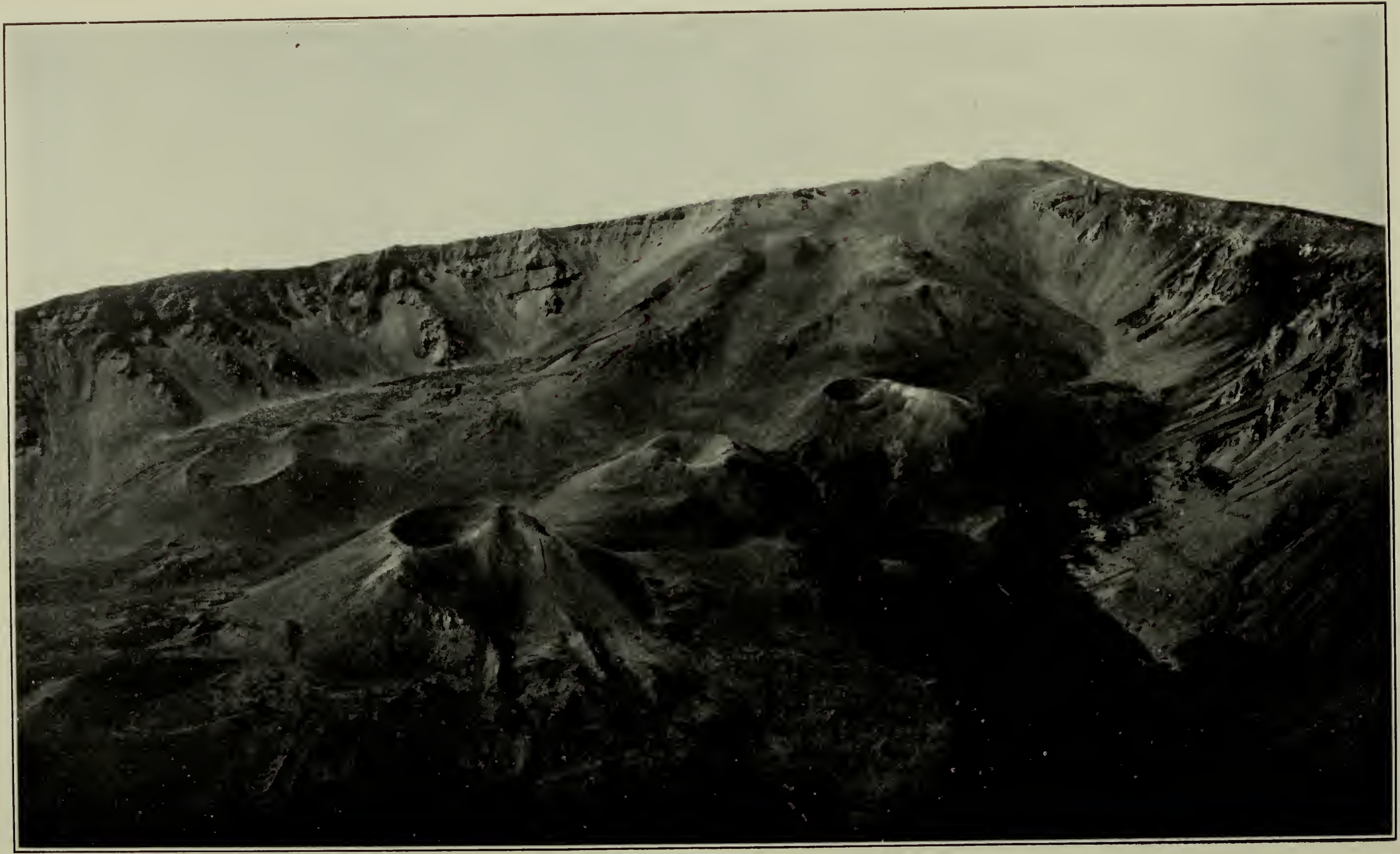
# HAWAII NATIONAL PARK

THE Hawaii National Park, created in 1916, includes three celebrated Hawaiian volcanoes, Kilauea, Mauna Loa, and Haleakala. " The Hawaiian Volcanoes," writes T. A. Jaggar, director of the Hawaiian Volcano Observatory, " are truly a national asset, wholly unique of their kind, the most famous in the world of science and the most continuously, variously, and harmlessly active volcanoes on earth. Kilauea crater has been nearly continuously active, with a lake or lakes of molten lava, for a century. Mauna Loa is the largest active volcano and mountain mass in the world, with eruptions about once a decade, and has poured out more lava during the last century than any other volcano on the globe. Haleakala is a mountain mass ten thousand feet high, with a tremendous crater rift in its summit eight miles in diameter and three thousand feet deep, containing many high lava cones.

" Haleakala is probably the largest of all known craters among volcanoes that are technically known as active. It erupted less than two hundred years ago. The crater at sunrise is the grandest volcano spectacle on earth."

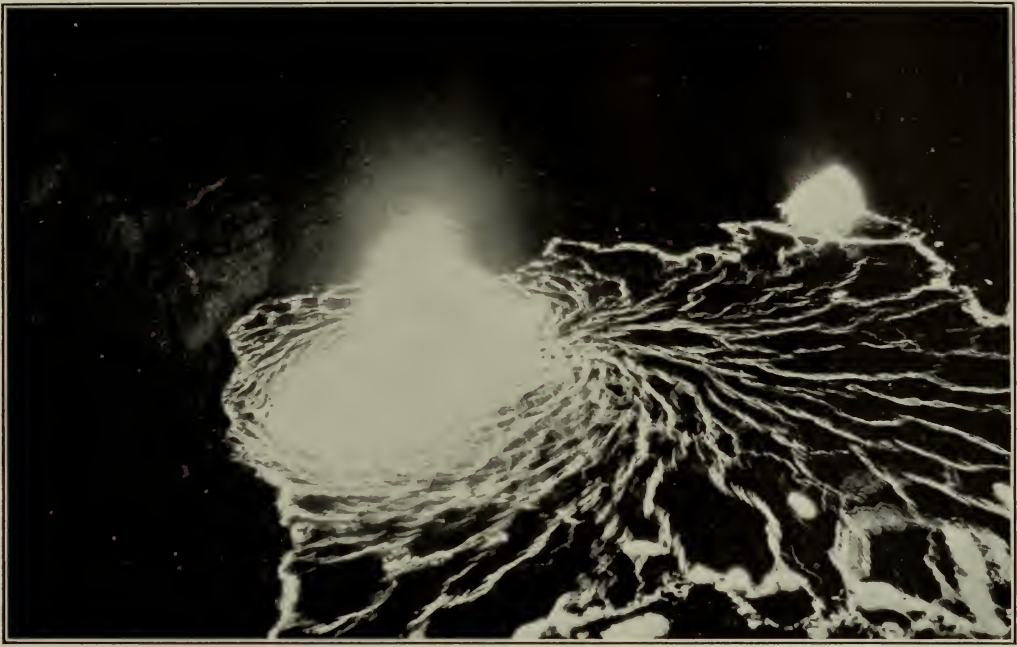
The lava lake at Kilauea when active is the most spectacular feature of the national park. It draws visitors from all over the world. It is a lake of molten, fiery lava a thousand feet long, splashing on its banks with a noise like waves of the sea, while great fountains boil through it fifty feet high.

The park also includes gorgeous tropical jungles and fine forests. Sandalwood, elsewhere extinct, grows luxuriantly. There are mahogany groves.



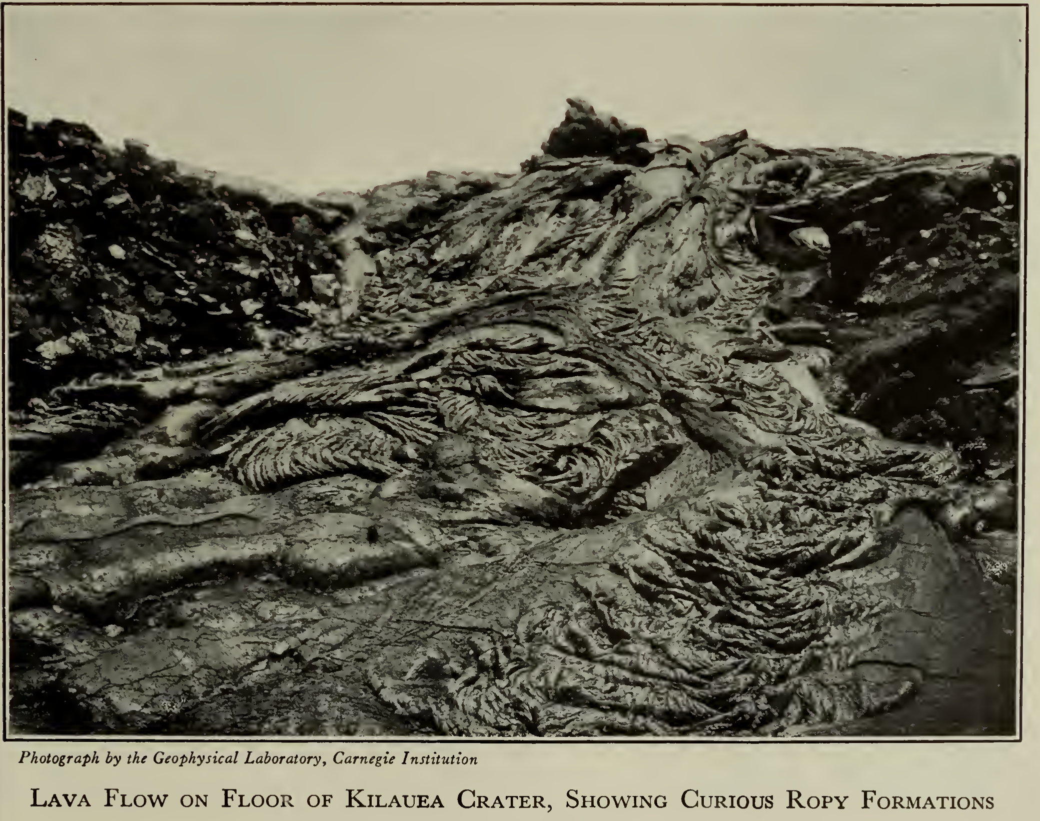
Photograph by Eleventh Photo Section, U. S. Army Air Corps

ONE CORNER OF THE ENORMOUS CRATER OF HALEAKALA



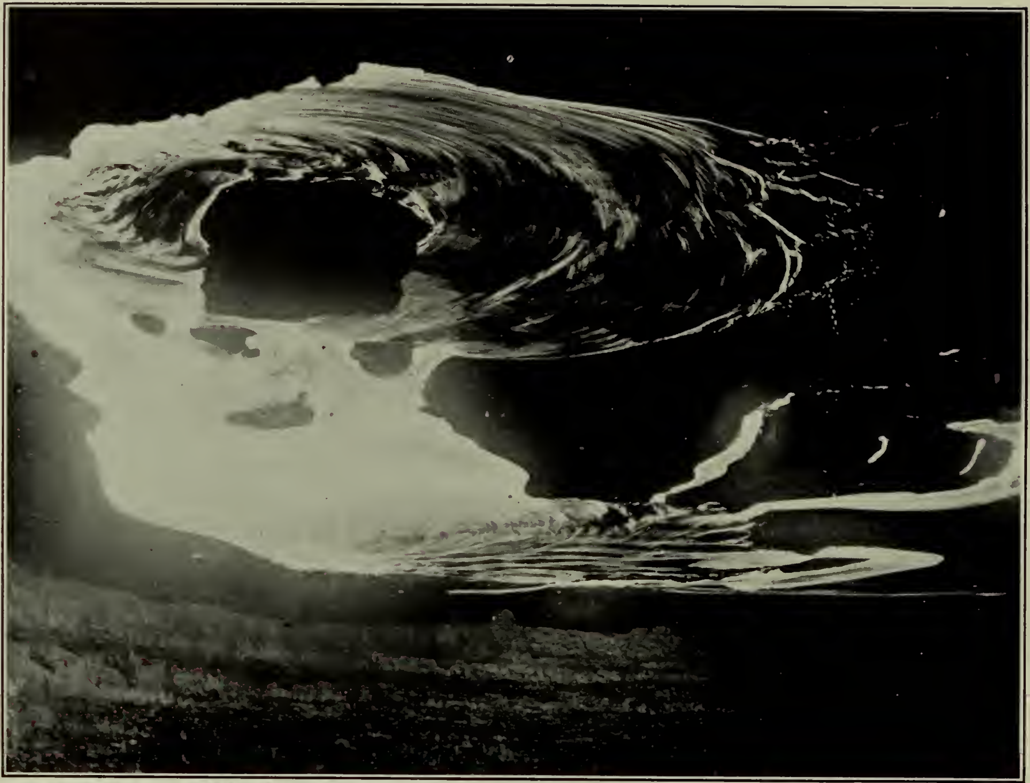
*Photograph by Higashida*

NIGHT VIEW OF LAVA FLOW THROUGH THE FLOOR OF HALEMAUMAU



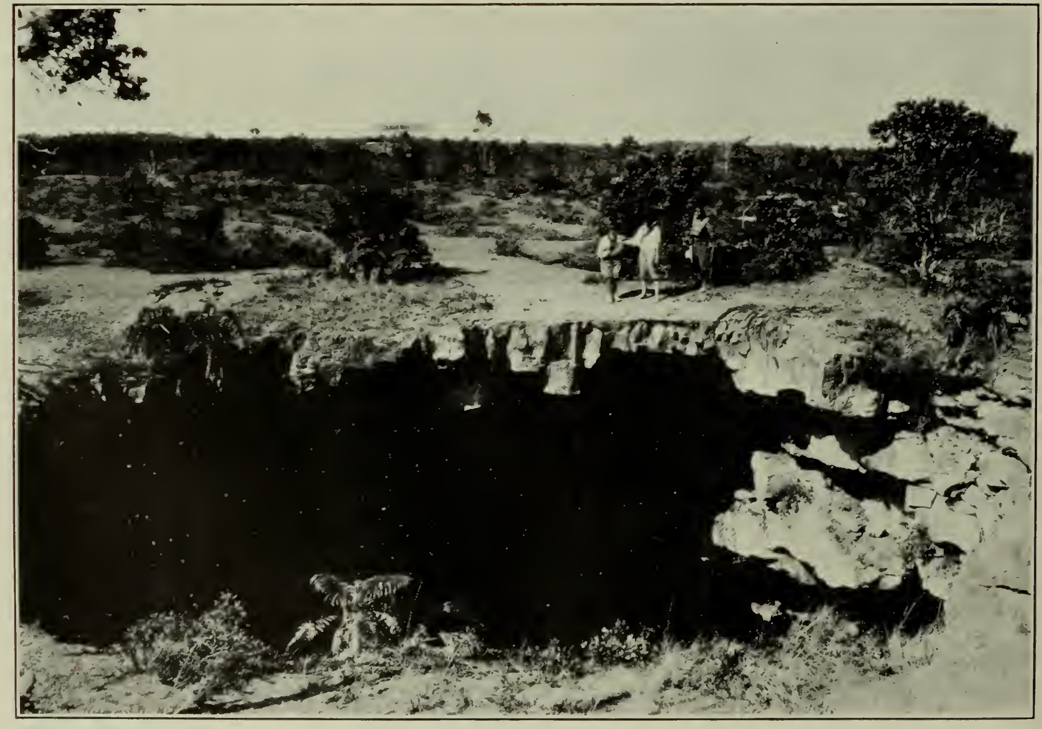
*Photograph by the Geophysical Laboratory, Carnegie Institution*

LAVA FLOW ON FLOOR OF KILAUEA CRATER, SHOWING CURIOUS ROPY FORMATIONS



*Photograph by Hawaiian Volcan Observatory*

FIERY MOLTEN LAVA LAKE IN KILAUEA



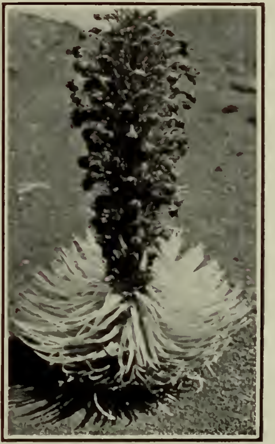
*Photograph by Baker*

THE DEVIL'S THROAT ON THE NEW CHAIN OF CRATERS ROAD, THE MOST ACCESSIBLE OF SEVERAL PIT CRATERS

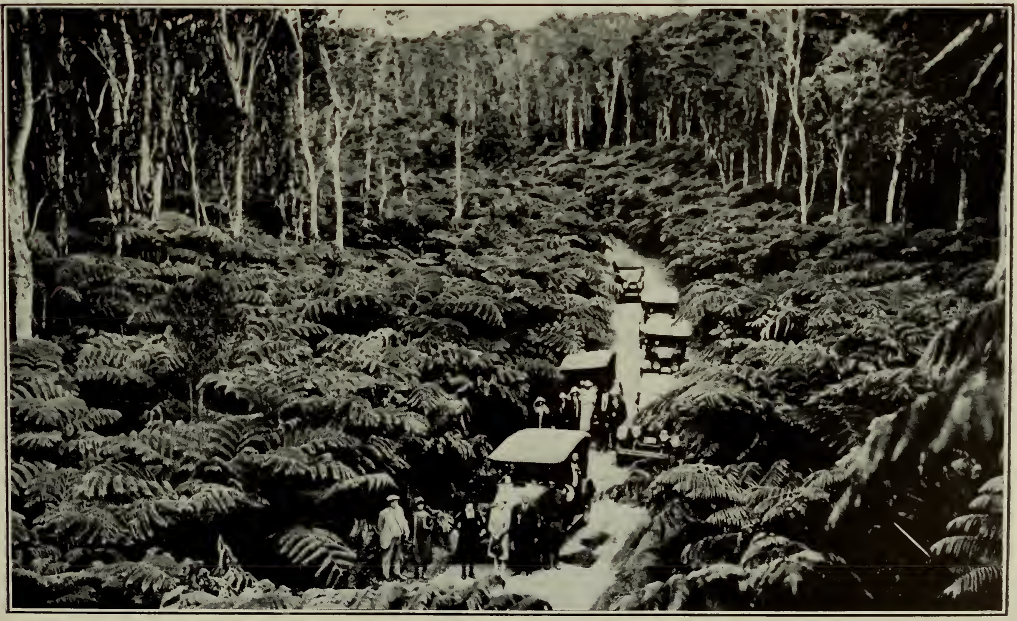
# ITS TROPICAL GARDENS

ALTHOUGH the section of the Hawaii National Park on the island of Maui includes only the summit of Haleakala, the sections on the island of Hawaii extend from the summit of Mauna Loa, thirteen thousand six hundred and fifty-three feet in elevation, to Kilauea, and on to the seacoast. " From skiing to surfing in one day " could become an accomplished fact. Besides great lava flows, steaming craters, and countless lava tubes, the park contains forests of koa, which produce Hawaiian mahogany of the glowing lighter tints, ohias with their terra cotta pompons of flowers, fragrant sandalwood; fine roads bordered with fuchsias, gaily colored nasturtiums, and blossoms of ginger; well-kept trails through tropical jungles where tree ferns reach a height of forty feet; lower slopes of brightly colored flowers on tree and shrub. The floral profusion of the islands is revealed by the fact that the brilliant hibiscus appears in Hawaii in fifteen hundred varieties.

Sugarcane, of course, is grown commercially on a large scale; and acres upon acres of pineapple clothe the valleys with velvety green. The coconut palm, with its long slanting stem and feathery top, proclaims to the visitor that he is in a strange land.

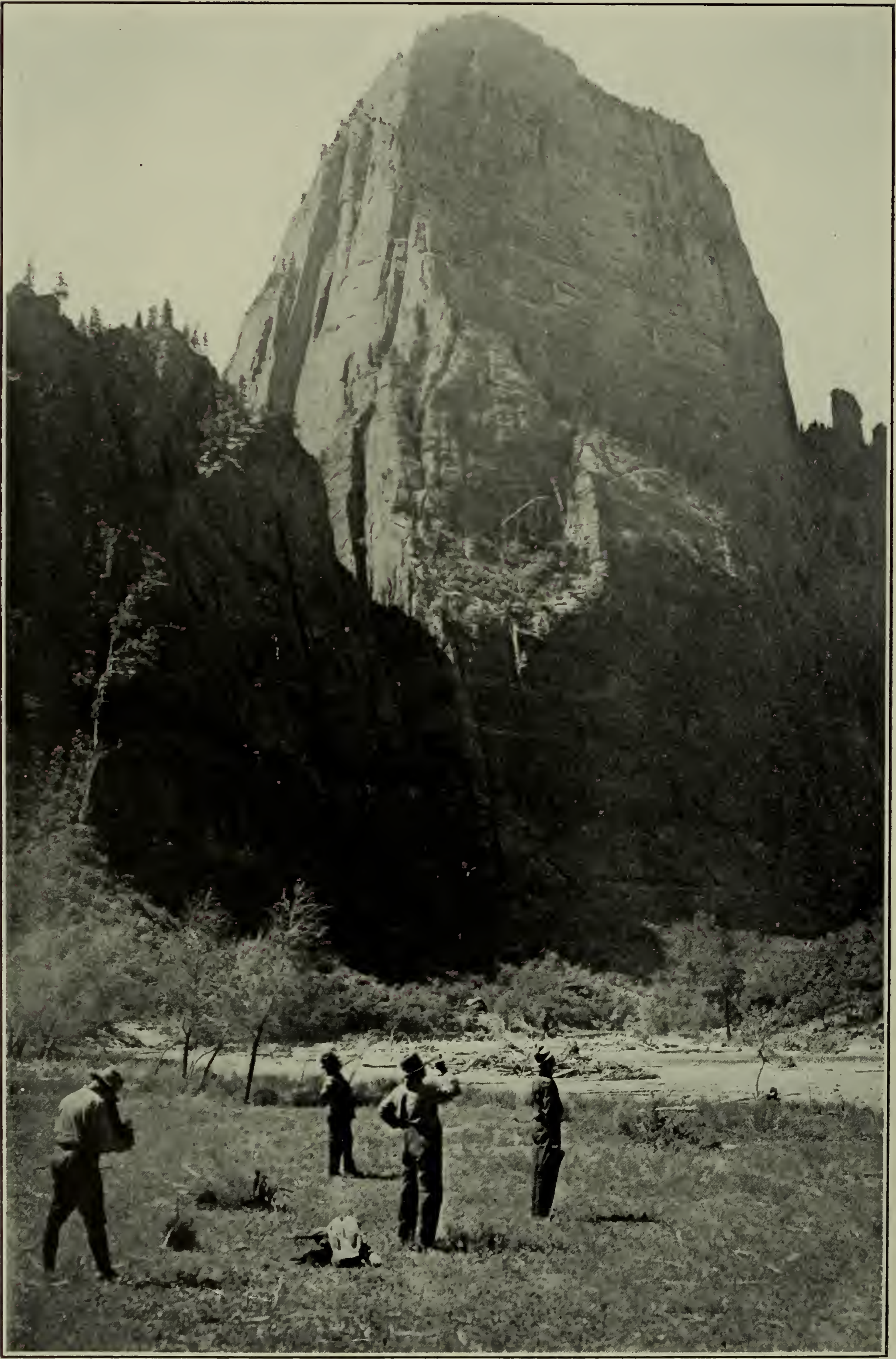


THE SILVER SWORD, WHICH GROWS ONLY IN THE CRATER OF HALEAKALA



*Photograph by Tai Sing Loo*

ROAD THROUGH GIANT FERN JUNGLE



*Photograph by Douglas White*

El Gobernador in Zion Canyon (The Great White Throne)

This monolith, which rises 3,100 feet from the valley floor, appears brilliant red two-thirds up, then glistening white

# ZION NATIONAL PARK

PICTURESQUE in the extreme is the canyon of many vivid colors, through which the North Fork of the Virgin River emerges from the shales and sandstones of southwestern Utah to find its way to the Colorado River and the Pacific. Zion Canyon was known to the Mormons as early as 1861. Later it was known to the geologists, who buried graphic descriptions in their scientific texts. It was made a national monument in 1909, but the public did not discover it until 1917. In 1919 it was made a national park. Now it is reached by rail and motor, and ample lodge accommodations and a free public automobile camp afford comfort for all comers.

Zion Canyon is in truth the Rainbow of the Desert. Its carved cliffs are quite as high and its conformation not dissimilar to those of the Yosemite Valley. But instead of granite, its precipices are of sandstone stratified in brilliant contrasts. Most of its cliffs are gorgeously red two-thirds up, and glistening white above; and some of these white-topped monsters are capped again in crimson. In places the white is streaked across with crimson bands like a Roman sash.

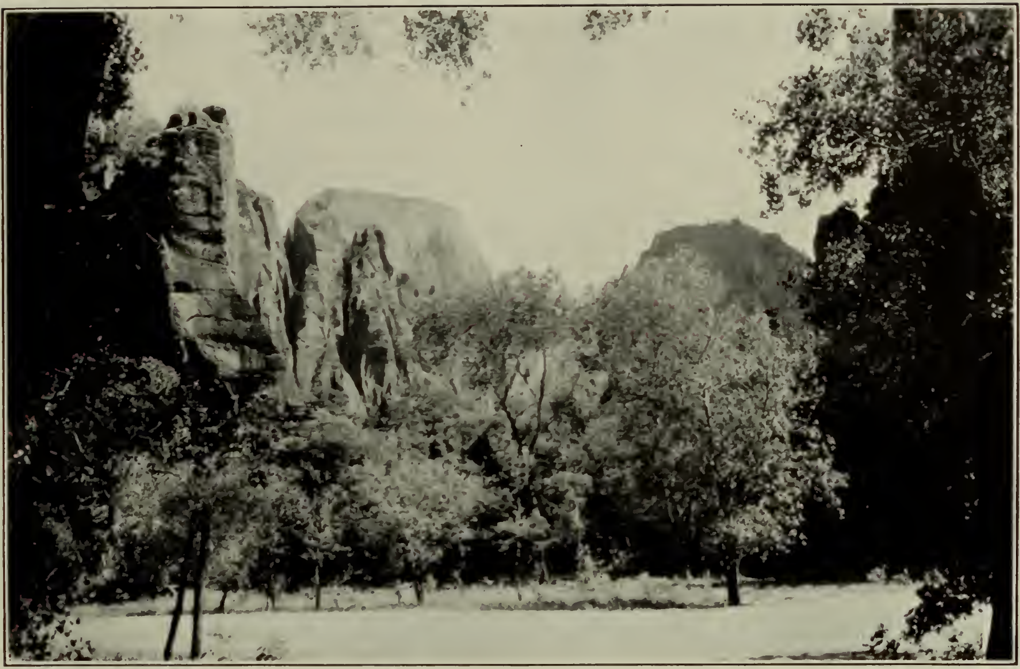
*Photograph by J. Reed Jones*

Zion Lodge

Often the White Tops of These Fairy Cliffs Are Streaked with Vermilion

*Photograph by Willis T. Lee*

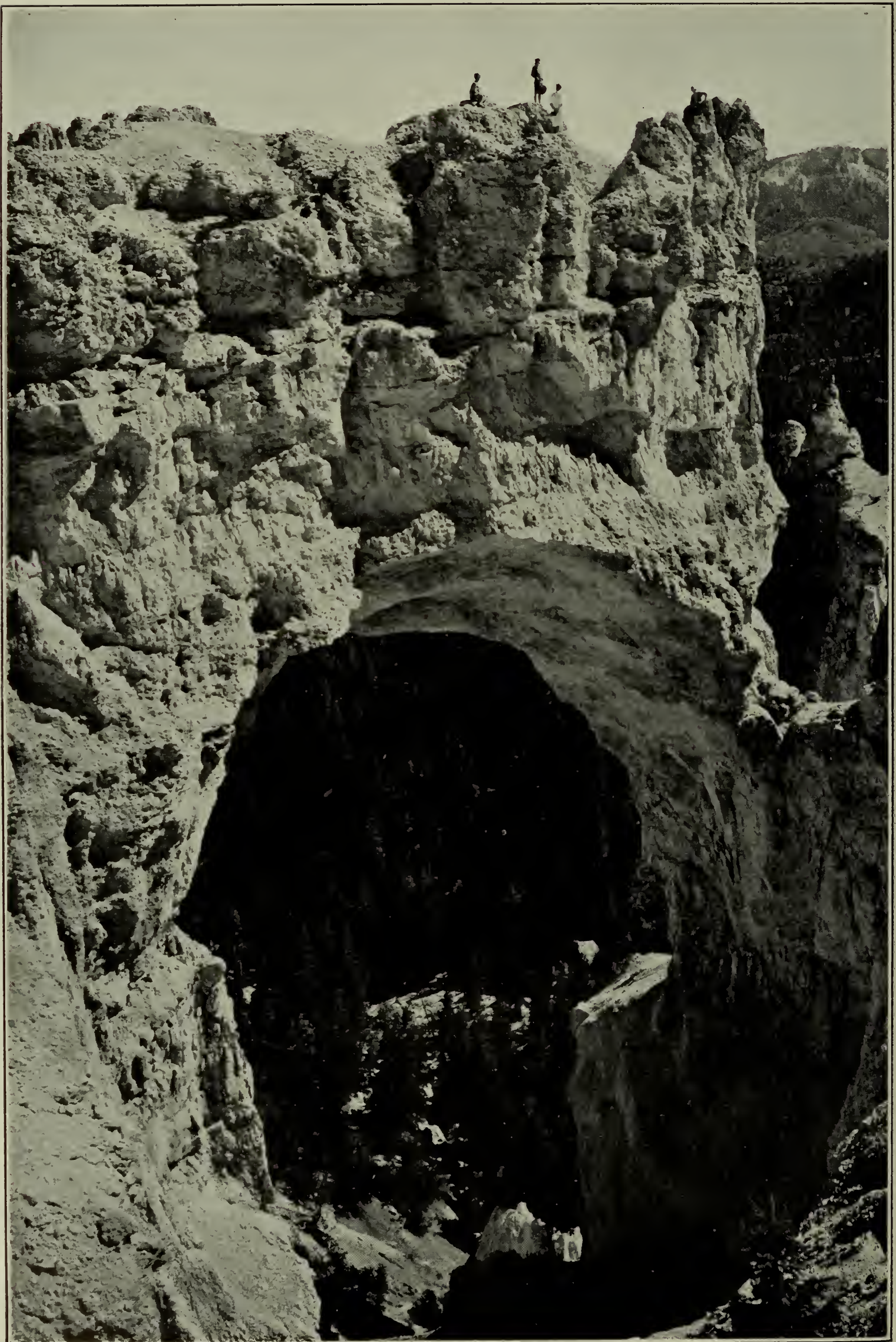
Where the Canyon Narrows



*Copyright by J. Reed Jones*

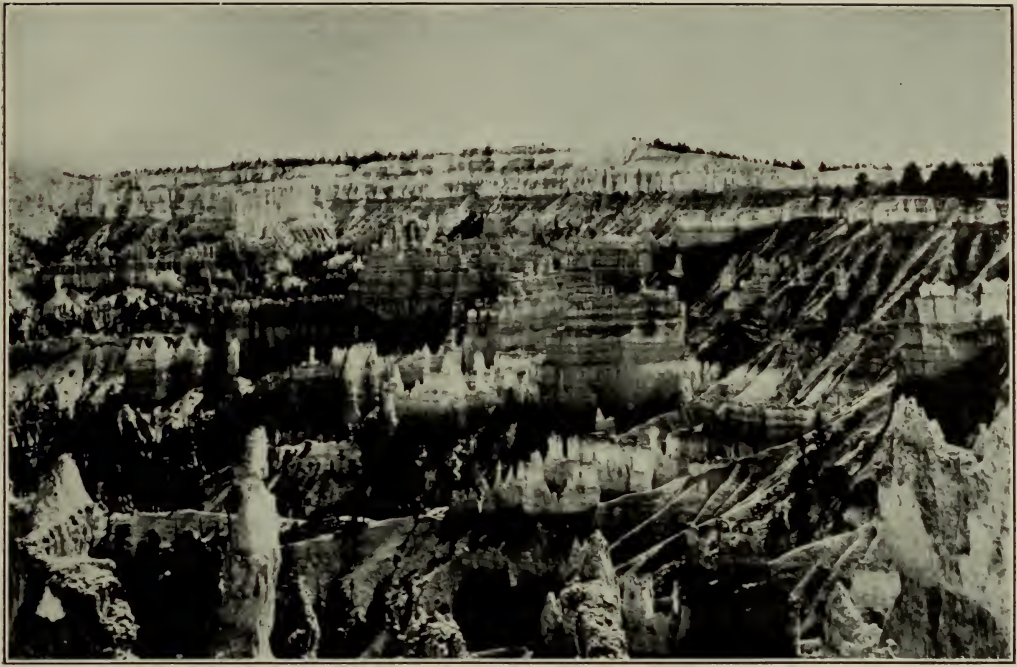
THE GREAT WHITE THRONE AND ANGELS LANDING FROM THE TEMPLE OF SINEWAVA

THE THREE PATRIARCHS—VERMILION TWO-THIRDS UP, WITH WHITE SUMMITS



*Photograph by Grant*

The Natural Bridge in Bryce Canyon



*Copyright by J. Reed Jones*

SILENT CITY IN BRYCE CANYON

# BRYCE CANYON NATIONAL PARK

THE highest and the newest of the canyon parks, Bryce Canyon is located in the same general desert region that produced the Grand Canyon and Zion. It, too, is the result of erosion, but because it was sculptured in a higher rock stratum, one that has long since been eroded from the more southerly canyons, it is different in form and coloring.

The park, through recent additions, now contains several great box canyons or amphitheaters. Bryce, however, is still the most important. It is a great horseshoe-shaped bowl, sunk deep into a plateau of brilliant composition and soft texture, and its eroded pinnacles and towers, its many queer formations, sculptured on a delicate scale, are exquisitely colored.

There is an unreal quality to the whole that lends to the air of enchantment. Entire cities of spires seem to rise against the sky line, deep rose at their base and their tips brilliant white, gleaming in the sunshine. Temples and towers, fairies and dwarfs, statues and busts of famous people, the superb and grotesque, all meet and mingle in the carvings of Bryce. There is no end to what the imagination may find.

Viewed at sunrise, the coral and rose-colored spires glow as though lighted by living fire, and by moonlight the higher white tips have an almost unearthly brilliance. Every hour of the day it is different, but always beautiful.

*Photograph by F. T. Scoyen*

Descending into the Canyon—The Wall of Windows in the Background

*Photograph by Grant*

A Comprehensive View of the Canyon from Bryce Point

*Copyright by J. E. Haynes, St. Paul*

THE MAGNIFICENT PANORAMA OF THE TETON MOUNTAINS VIEWED FROM ACROSS JACKSON LAKE

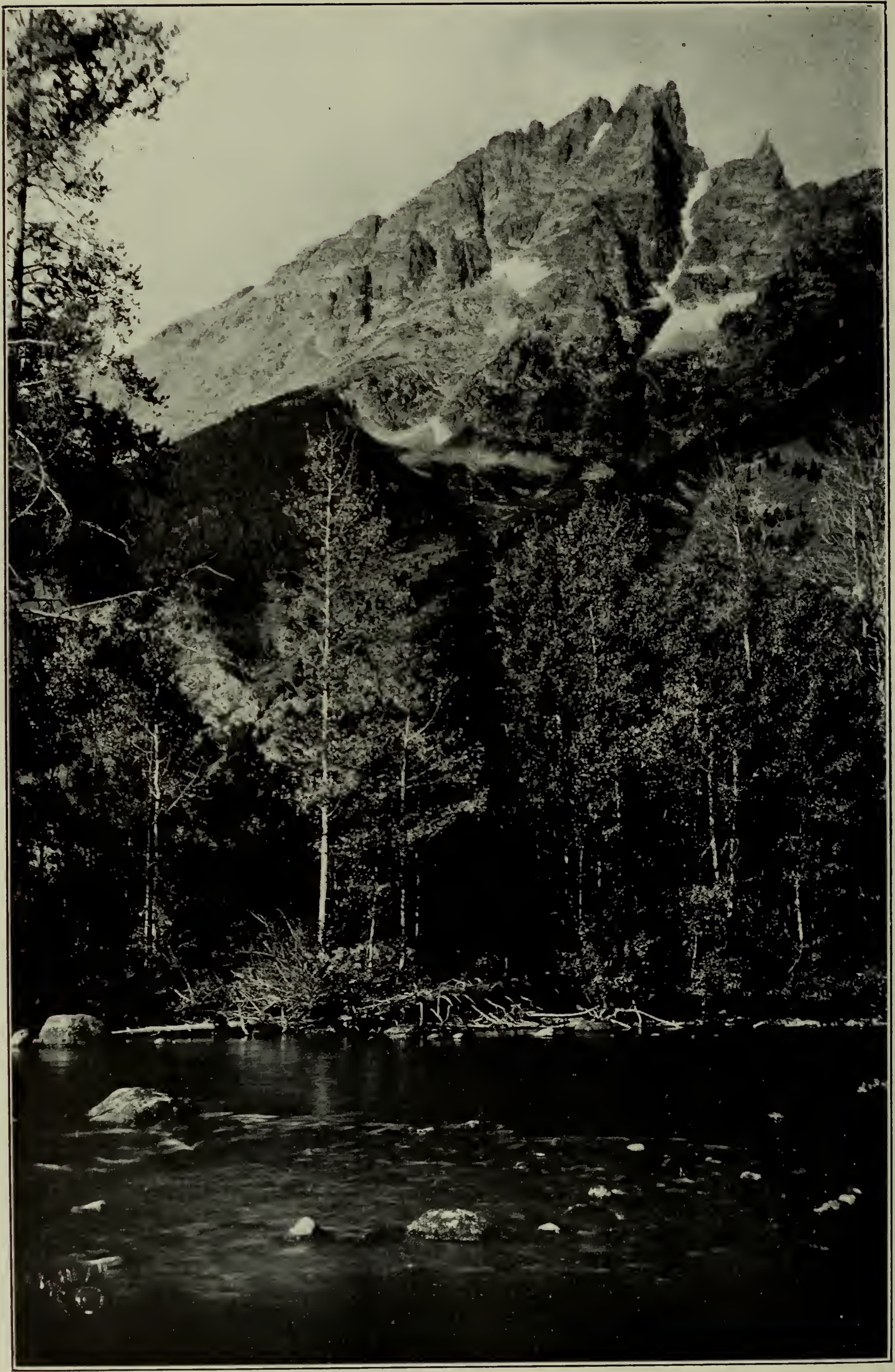
# GRAND TETON NATIONAL PARK

WITH its incomparable granite peaks and its historic and romantic past, the Grand Teton National Park is an area of absorbing interest. In it is the most impressive portion of the always impressive Teton Mountain Range. Its central feature, the Grand Teton Mountain group, is the scenic climax of the park and one of the noblest mountain masses in the world. Perhaps it can best be described as cathedral-like. On approaching it from the north, the visitor beholds a vast cathedral, built of granite and shaped by glaciers, of which the remnants are still at work. From the east and south it strikingly resembles the Matterhorn of the Alps.

To the east, and bordered by the Teton Mountain Range, lies the Jackson Hole, once famous as the rendezvous of the outlaw and the hunted. Now, dotted with peaceful cattle and dude ranches, it is still surrounded by an aura of romance, its inheritance from the past.

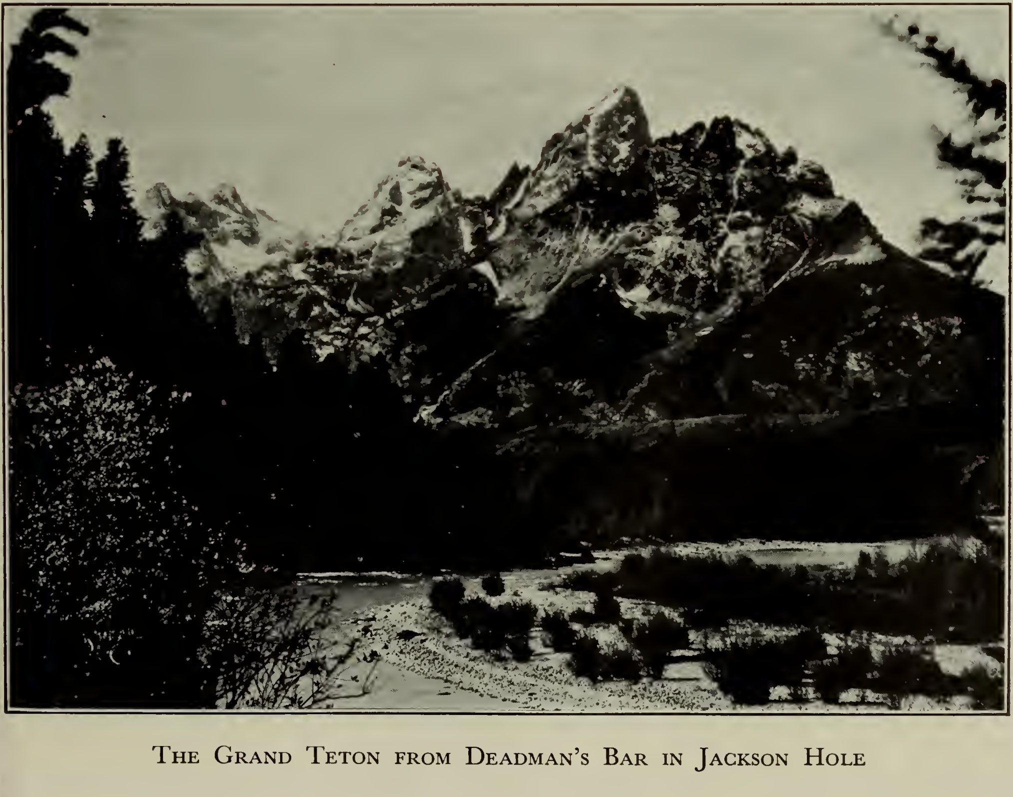
From the Jackson Hole the Tetons spring abruptly to a height of from nine to fourteen thousand feet. Here they present one of the most precipitous mountain fronts on the continent, if not in the world. The grandeur of the beetling gray crags, sheer precipices, and perennial snowfields is vastly enhanced by the total absence of foothills, and by contrast with the relatively flat floor of Jackson Hole.

Another delightful contrast to the rugged mountains is formed by the lovely, forest-encircled lakes that nestle at their feet and reflect their towering summits. The visitor should climb a few hundred feet up the mountainside near Jenny Lake, and look down upon this superb array of lakes. From this vantage point one sees that each lake lies outside the mouth of a canyon, and occupies a crescent-shaped glacial moraine.

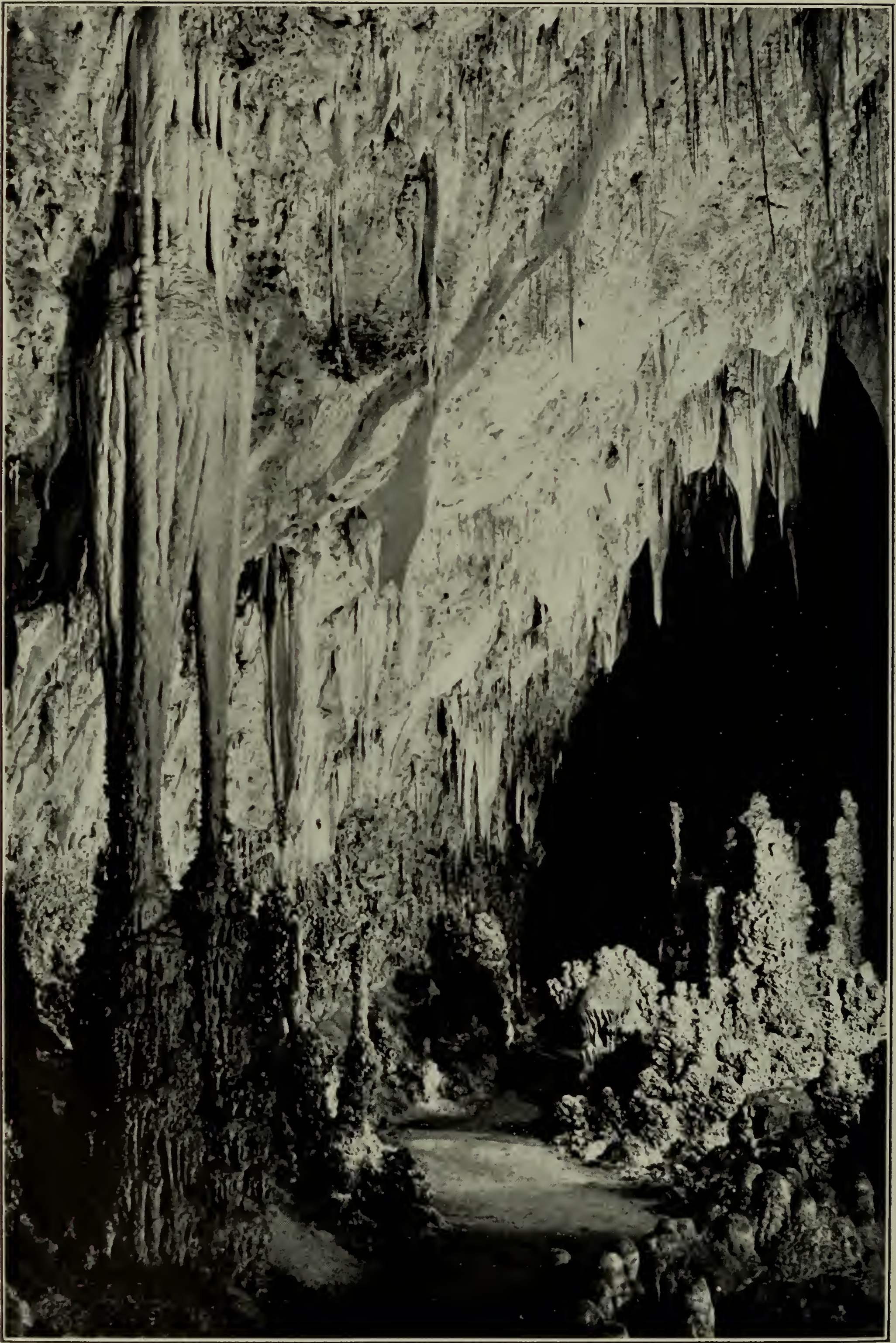


Forest-Encircled Jenny Lake

A Pack Train Trip Leaving Mount Moran

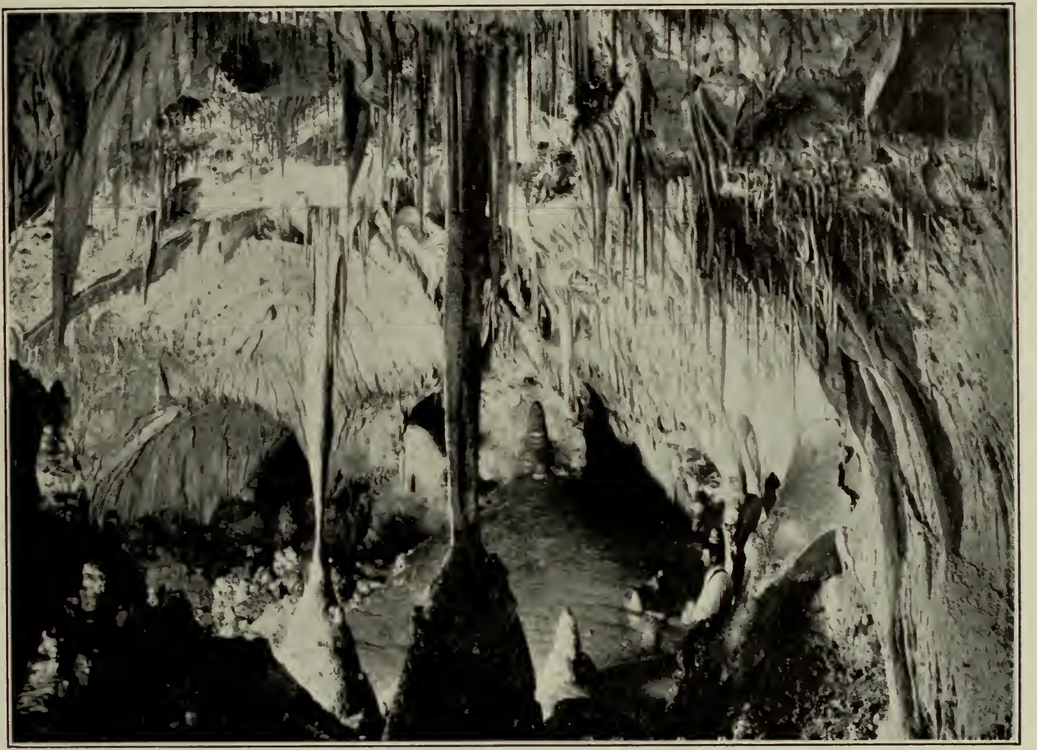


The Grand Teton from Deadman's Bar in Jackson Hole



*Photograph by Herbert Kennicott*

THE VARIETY OF LIMESTONE DECORATIONS IS AMAZING—SCENE IN THE BIG ROOM



The Dome Room of Carlsbad Caverns

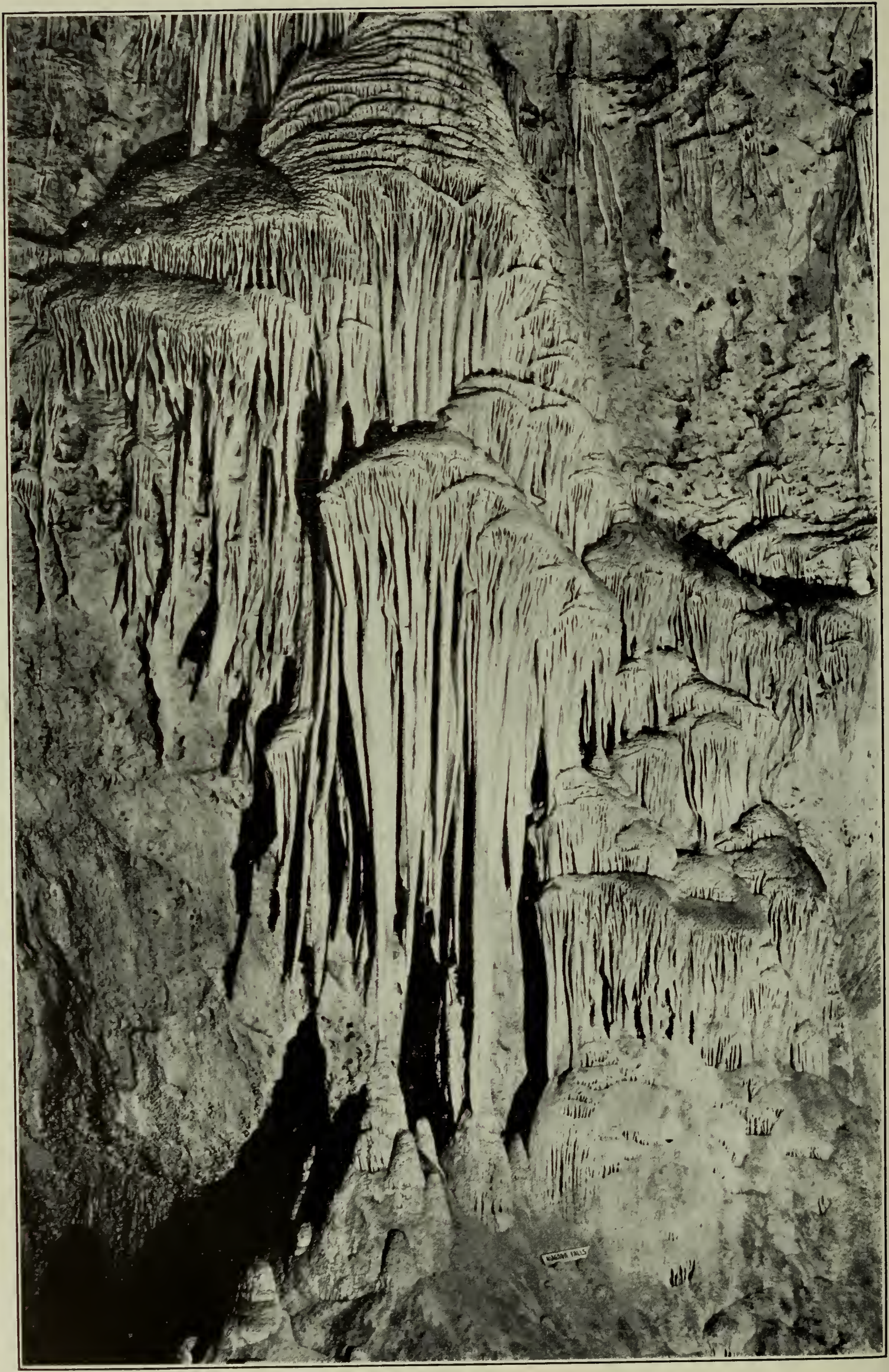
# CARLSBAD CAVERNS NATIONAL PARK

NOWHERE is the great age of the earth more strongly emphasized than in the gigantic series of chambers and passageways making up Carlsbad Caverns. Once part of the solid mountains, countless ages ago subterranean waters gradually penetrated, softening and carrying away particle after particle of limestone and forming room after room.

When word of the glories of these caverns first reached the outside world, an expedition sent by the National Geographic Society spent six months exploring them, covering a distance of twenty-two miles, but the limits of the caverns were not touched. Several more miles have since been explored. How many more miles this underground wonder penetrates into the earth is still a matter of speculation and a lure for the explorer.

Particularly impressive is the Big Room, nearly four thousand feet long and six hundred wide. From wall to wall, and from floor to the ceiling three hundred feet above, it is filled with an incomparable array of stalagmites and stalactites of gleaming onyx and of infinite size and variety.

Full recognition of the subterranean wonders contained in Carlsbad Caverns was given in 1930, when the area, formerly a national monument, was given national park status.


NIAGARA FALLS

Niagara Falls in Big Room

# MID-CONTINENT PARKS

## THE WIND CAVE NATIONAL PARK

IN THE romantic Black Hills of southwestern Dakota, scene of Custer's first stand and famous for many years because of its Indian battles and frontier lawlessness, is a limestone cave of large size and interesting decorations. It is called Wind Cave, from a strange current of air which passes intermittently through it, and which led to its discovery.

The cave contains a series of chambers and passages profusely decorated in limestone depositions of various forms, many of them unique. Most of the decorations are pure white, but sometimes they are superimposed on a delicate pink background. Strangely enough, despite this profusion of formations, stalactites and stalagmites, common cave forms, are seldom encountered.

Within the inner caverns, the whistling wind disappears and the air is calm and still. Here the temperature varies from forty-five to forty-seven degrees, Fahrenheit, just comfortable for walking.

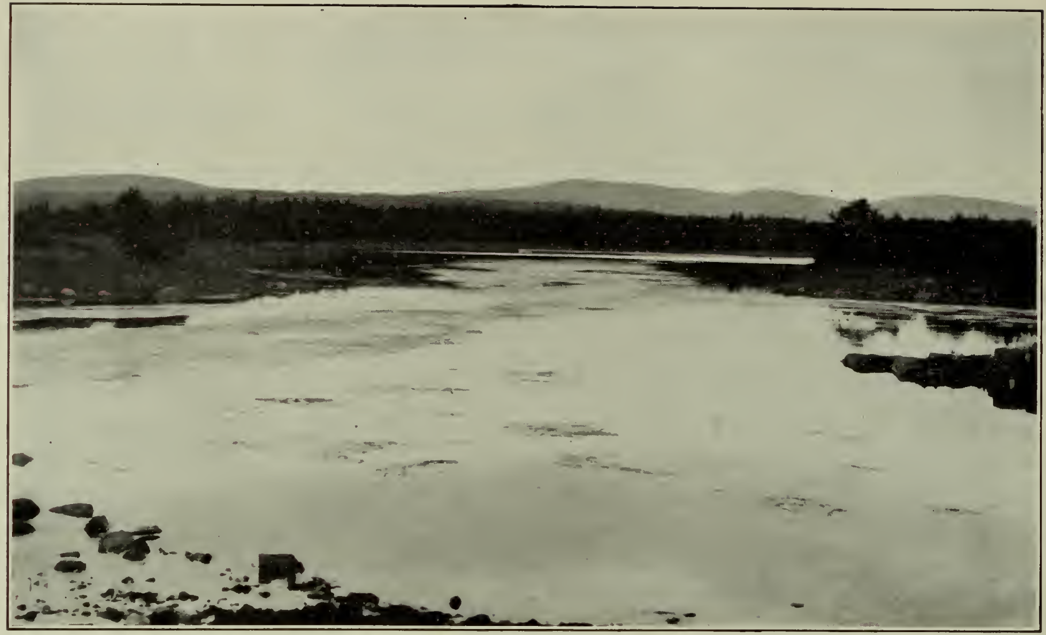
A portion of the area serves as a national game preserve and is stocked with bison, elk, and antelope. Inside the cave, however, practically no life is found, even insects being seldom seen.

## THE PLATT NATIONAL PARK

PLATT PARK is known primarily because of its springs, mineral and nonmineral. The yield from these springs is approximately five million gallons daily. The park is located in the southern part of Oklahoma.

The park is a hilly, well-wooded area, traversed by a picturesque stream containing a number of small waterfalls or cascades. The rolling character of the park makes a pleasing contrast to the comparatively level country surrounding it.

There are a few buffalo, elk, and deer in Platt Park, and many smaller animals.



A Tidal Reach at Sundown

# ACADIA NATIONAL PARK

ACADIA NATIONAL PARK, formerly Lafayette, is located in old Acadian territory on the coast of Maine. The greater part of it is located on Mount Desert Island, so named by the French explorer Champlain, who first saw its bare rock peaks against the western sky. Recently the park was extended beyond the limits of Mount Desert Island, to include a bold promontory across Frenchmans Bay.

The coast of Maine, like every other boldly beautiful coastal region whose origin is nonvolcanic, was formed by the flooding of an old and waterworn land surface, which turned its heights into islands and headlands, its stream courses into arms and reaches of the sea, and its broader valleys into bays and estuaries.

From Penobscot Bay to Frenchmans Bay the scenery culminates in bold mountainous formations and in a beauty which has long been famous. A multitude of islands links these bays with delightful waterways traversed of old by the Indians in their bark canoes and now ideal for power and other quiet-water boating. Mount Desert Island is the easternmost and largest in this archipelago. Its mountain range, the dominant landscape feature of the national park, fronts the sea.

Surf on the Ocean Drive

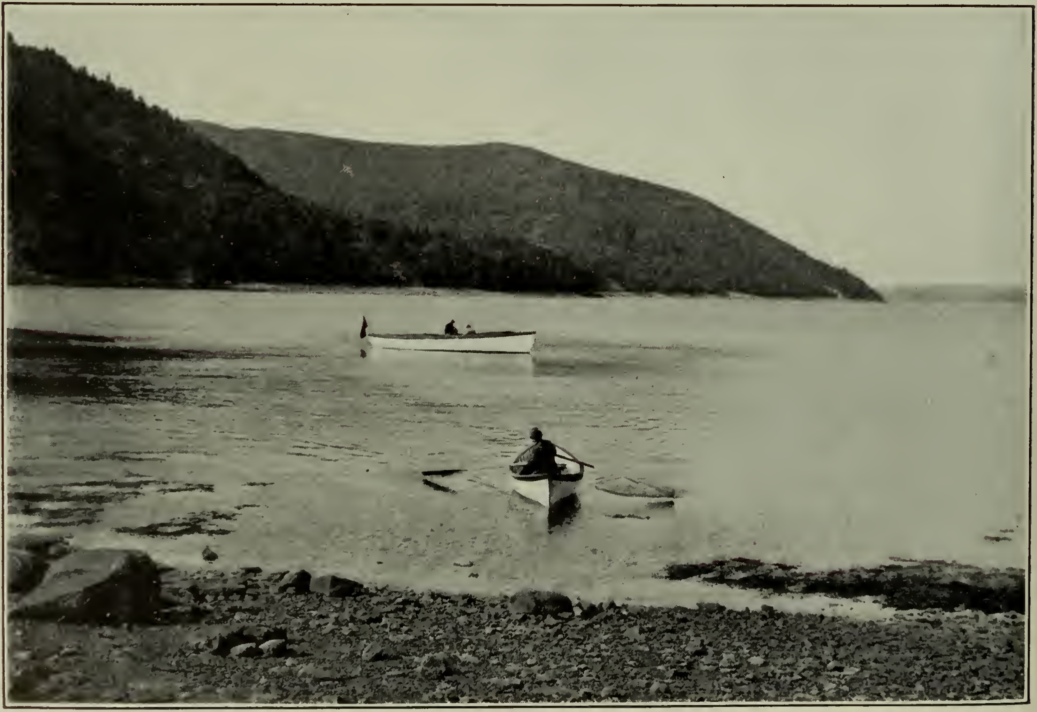
Outlet to the Tarn

DEEPLY trenched by glacial erosion dividing it into separate peaks, the park's highest summit, Cadillac Mountain, rises as a solid block of granite to a broad-topped elevation over fifteen hundred feet above the ocean level and descends, surf swept, beneath it. To this summit, from which one looks out over a vast expanse of ocean, the Government is building a road which for sheer beauty of outlook will have few equals. The other peaks of the range will be reserved for walkers.

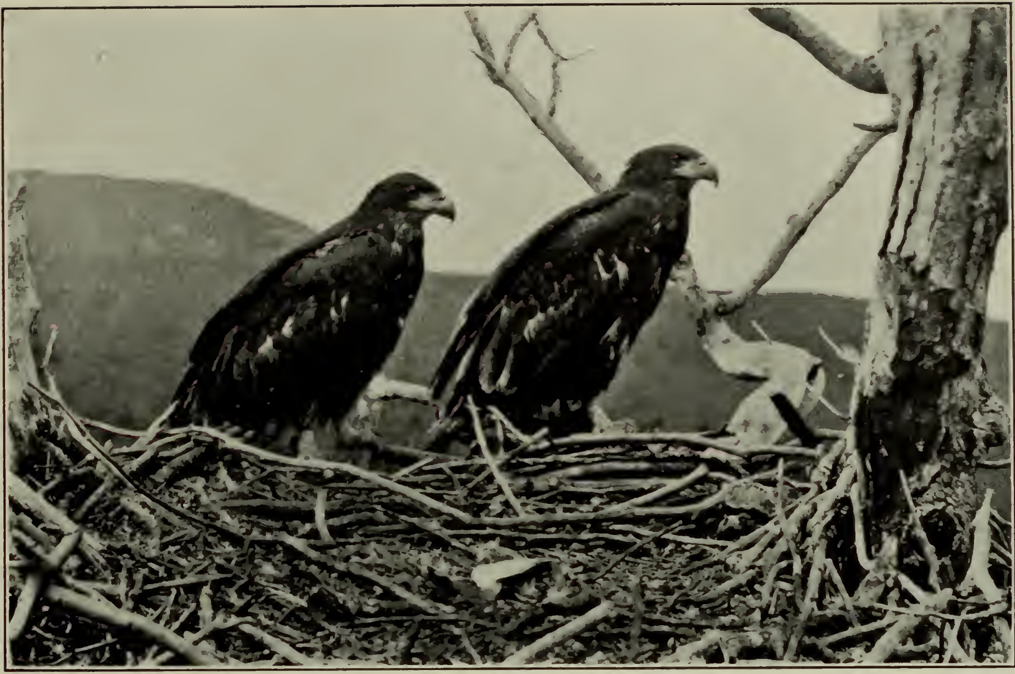
From far out at sea, and east and west along the coast, these bold rock masses dominate the landscape. Eastward the sun rises from the Bay of Fundy, the " Deep Bay." Westward it sinks behind the distant Camden Hills over the archipelago with its mingled lands and waters.

The age-old beauty of the granite peaks and landlocked waters is but a part of Acadia's charm. Great forests of coast pines, cedars, and deciduous trees of many kinds border the lakes and climb the gray sides of the mountains. Innumerable shrubs and flowering plants abound. It is a woodland typical of the noblest woodlands of the East.

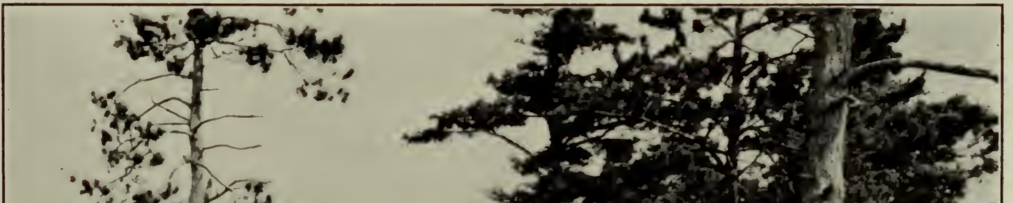
Around it all is the glamour of historic associations. Once home of the stone-age Indians, it was the first land within the United States reached by Champlain. Its very name, Acadia, comes from a word of native origin and was used upon their return to Europe by early fishermen and traders who visited the area even before recorded French and English explorations.



Boating on the Placid Waters of Valley Cove



Young Bald Eagles Nesting in Acadia National Park



Motor Camping in Acadia Park

Acadia's Combination of Mountains, Coast, and Eastern Forest is Inspiring

THE Acadia National Park is a monument to the public spirit of New England. Its beautiful exhibit of seacoast, mountain, and eastern forest was in danger from the fast-encroaching forces of settlement. Inspired and led by George B. Dorr, superintendent of the park since its creation, a few generous people, through a dozen years of ceaseless effort, were able to obtain and offer to the Government five thousand acres of land on Mount Desert Island for park purposes. From this nucleus has grown the present park of considerably more than twice that size. And it has not yet finished growing, for other lands have since been pledged for addition to it. Eventually it is expected that the area of this pioneer eastern park will be four times its original acreage.

Other national parks in the eastern portion of the country are in process of formation—in the Great Smoky Mountains of North Carolina and Tennessee, on the Blue Ridge of Virginia overlooking the war-famous valley of the Shenandoah, in the Mammoth Cave region of Kentucky, and in northern Lake Superior where Isle Royale, belonging to the State of Michigan, also has been authorized for national park status. Each of these parks will mean much to the citizens of the eastern portion of the United States, and together with Acadia they will form an important eastern park-to-park travel circuit. To Acadia National Park, however, will belong the honor of having led the way in eastern national-park establishment; and also the distinction of having been the first one created wholly by gift of citizens to the United States, for the use of the people generally.

Truly, a historic region!

Photograph by J. K. Piggott

A GLIMPSE OF THE BEAUTIFUL MUIR WOODS

# THE NATIONAL MONUMENTS *in the* FOREST PRIMEVAL

WITHIN ten miles of the city of San Francisco, in Marin County, California, lies one of the noblest forests of primeval Redwood in America. That it stands to-day is due first to the fact that its outlet to the sea instead of to San Francisco Bay made it unprofitable to lumber in the days when redwoods grew like grain on California's hills.

The Muir Woods National Monument contains over four hundred acres. Interspersed with the superb Redwood, the Sequoia sempervirens, sister to the Giant Sequoia of the Sierra, are many fine specimens of Douglas fir, madrona, California Bay, and mountain oak. The forest blends into the surrounding wooded country. It is essentially typical of the redwood growth, with a rich stream-watered bottom carpeted with ferns, violets, oxalis, and azalea. Many of the redwoods are magnificent specimens and some have extraordinary size. Cathedral Grove, and Bohemian Grove, where the famous revels of the Bohemian club were held before the club purchased its own permanent grove, are unexcelled in luxuriant beauty.

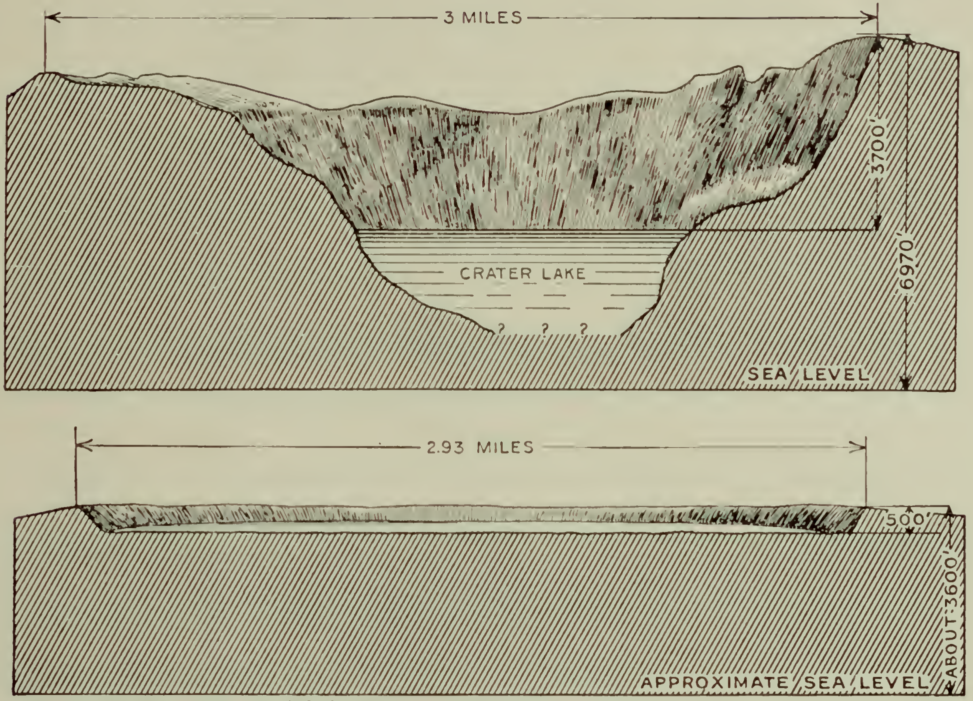
This splendid area of forest primeval was named by its donors, Mr. and Mrs. William Kent, in honor of the celebrated naturalist, John Muir.

*Photograph by H. C. Tibbitts*

MUIR WOODS

It is one of the noblest forests of redwood saved from the ax

# KATMAI'S STEAMING VENTS



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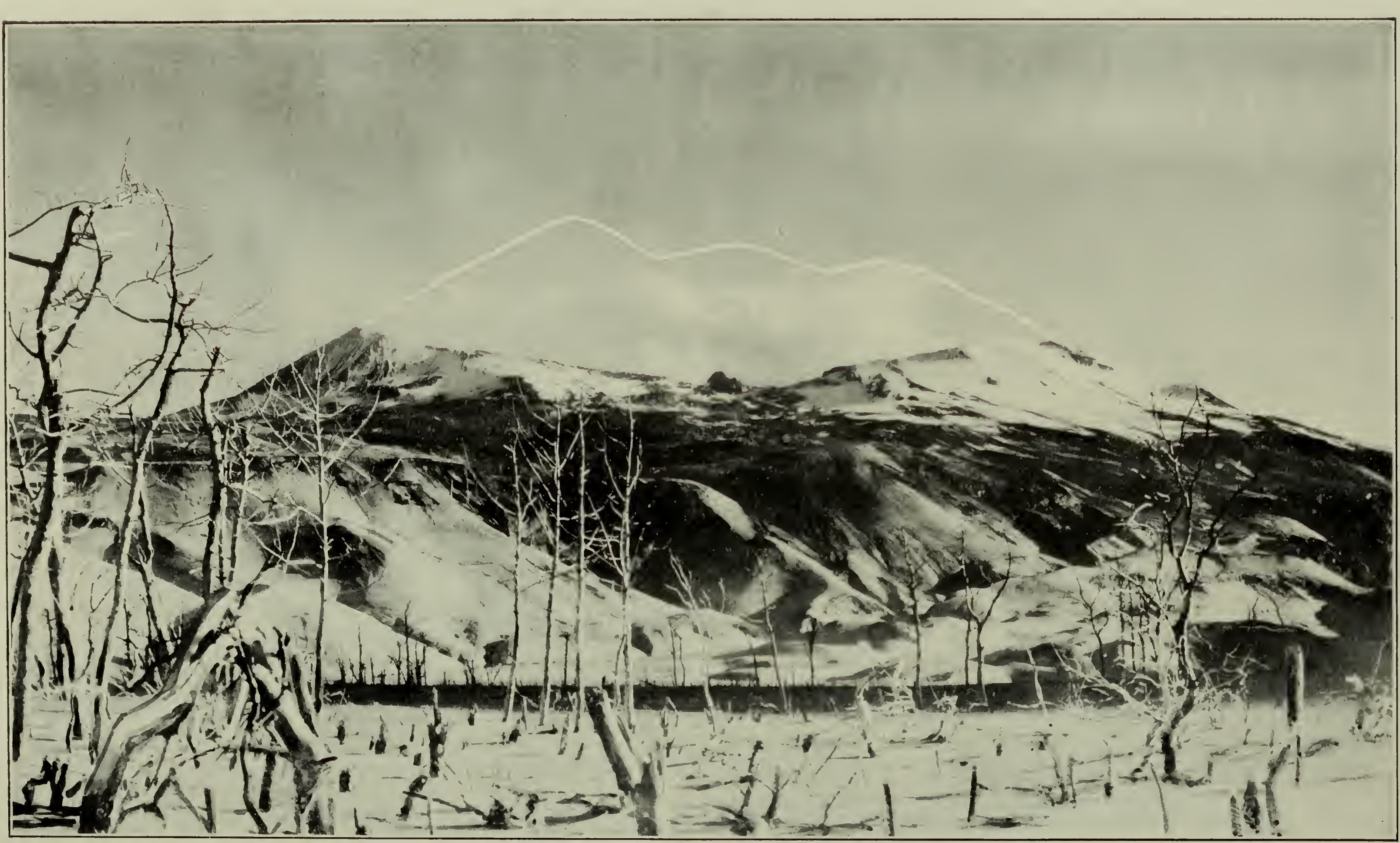
THE KATMAI CRATER (UPPER) COMPARED WITH KILAUEA CRATER (LOWER)

ONE of the greatest explosive volcanic eruptions of recent times blew several cubic miles of material out of Mount Katmai, on the southern shore of Alaska, in June, 1912. It left a great gulf where once the summit reared, and in its bottom a crater lake of unknown depth. A few miles away, across the divide, lies a group of valleys from which burst many thousands of vents of superheated vapors. The greatest of these has been named the " Valley of Ten Thousand Smokes."

This remarkable volcanic region, to explore which the National Geographic Society has sent five expeditions, has no parallel elsewhere to-day. It is a veritable land of wonders. In the valley the ground in many places is too hot for walking. In others one may camp comfortably on the coldest nights in a warm tent and cook one's breakfast on a steaming crack outside. The volume is beyond belief. A few feet below the surface, the temperature of the vents is often excessively high. Once the Yellowstone geyser basins probably resembled the " Valley of Ten Thousand Smokes," and a few hundred thousand years from now this valley may become a geyser basin greater than Yellowstone's.

The explosion which wrecked Mount Katmai was heard at Juneau, seven hundred and fifty miles away. Its dust fell at Ketchikan, nine hundred miles away. Its fumes were smelled at Vancouver Island, fifteen hundred miles away.



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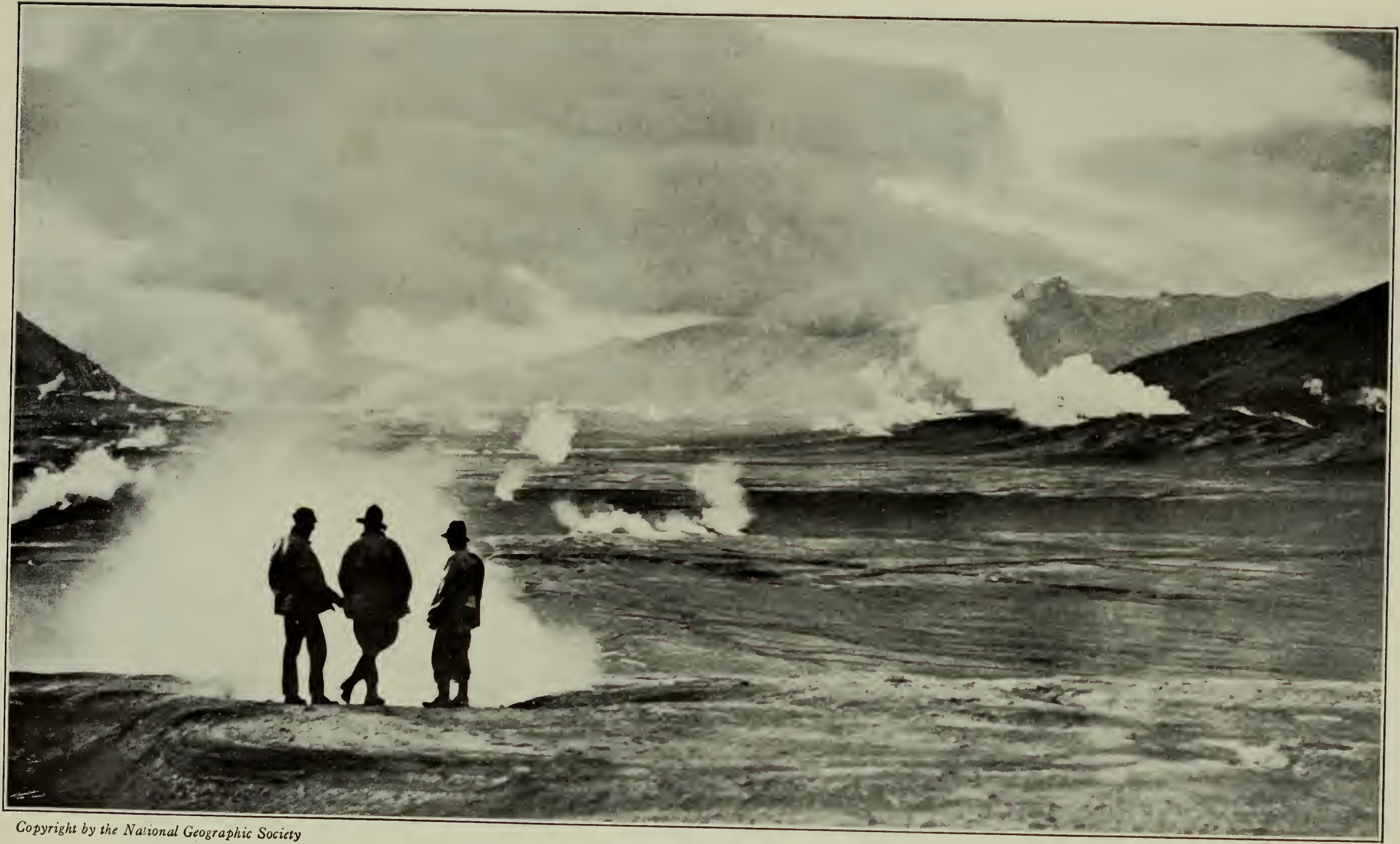
Mount Katmai as it Appears To-day. The White Line Shows its Original Contour Before the Stupendous Eruption of June, 1912



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SUPPER TIME IN THE "VALLEY OF TEN THOUSAND SMOKES"

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DOWN THE STEAMING SURFACE OF FALLING MOUNTAIN ROLL MASSES OF ROCKS OF ALL SIZES

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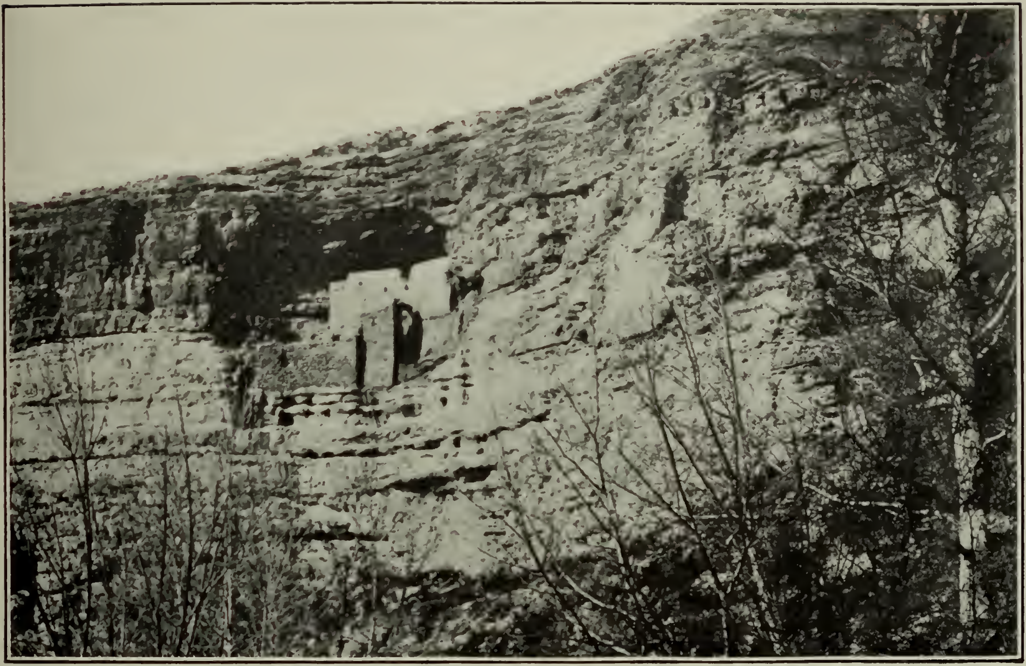
FOLLOWING THE GREAT ERUPTION, A VAST QUANTITY OF PASTY LAVA ISSUED FROM THE VENT



Montezuma Castle

## MONTEZUMA CASTLE NATIONAL MONUMENT

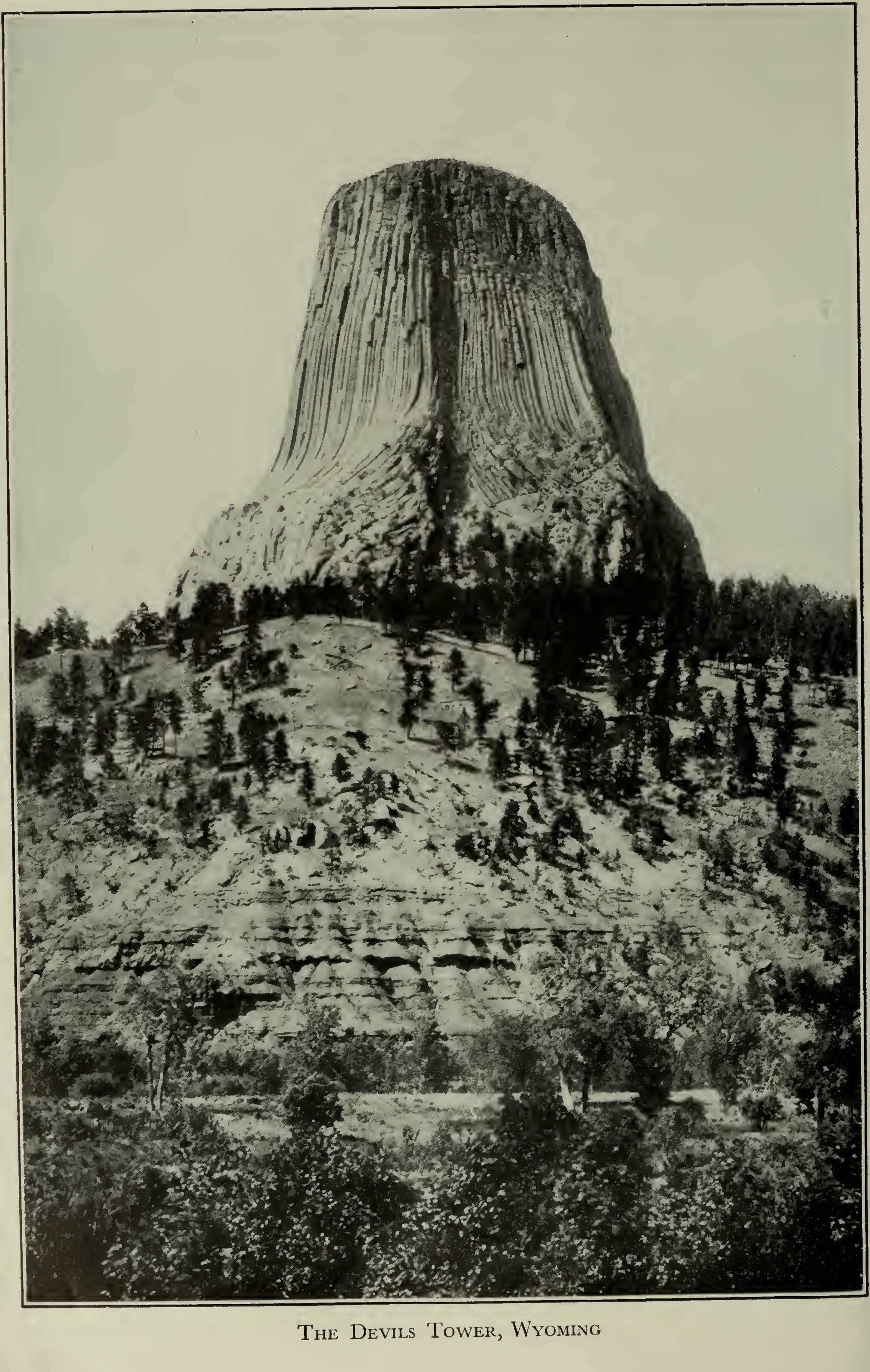
THIS remarkable relic of a prehistoric race is the principal feature of a well-preserved group of cliff dwellings in the northeastern part of Yavapai County, Arizona, known as the Montezuma Castle National Monument. The unique position and size of the ruin gives it the appearance of an ancient castle; hence its name.

The structure is about fifty feet in height by sixty feet in width, built in the form of a crescent, with the convex part against the cliff. It is five stories high, the fifth story being back under the cliff and protected by a masonry wall four feet high, so that it is not visible from the outside. The walls of the structure are of masonry and adobe, plastered over on the inside and outside with mud.

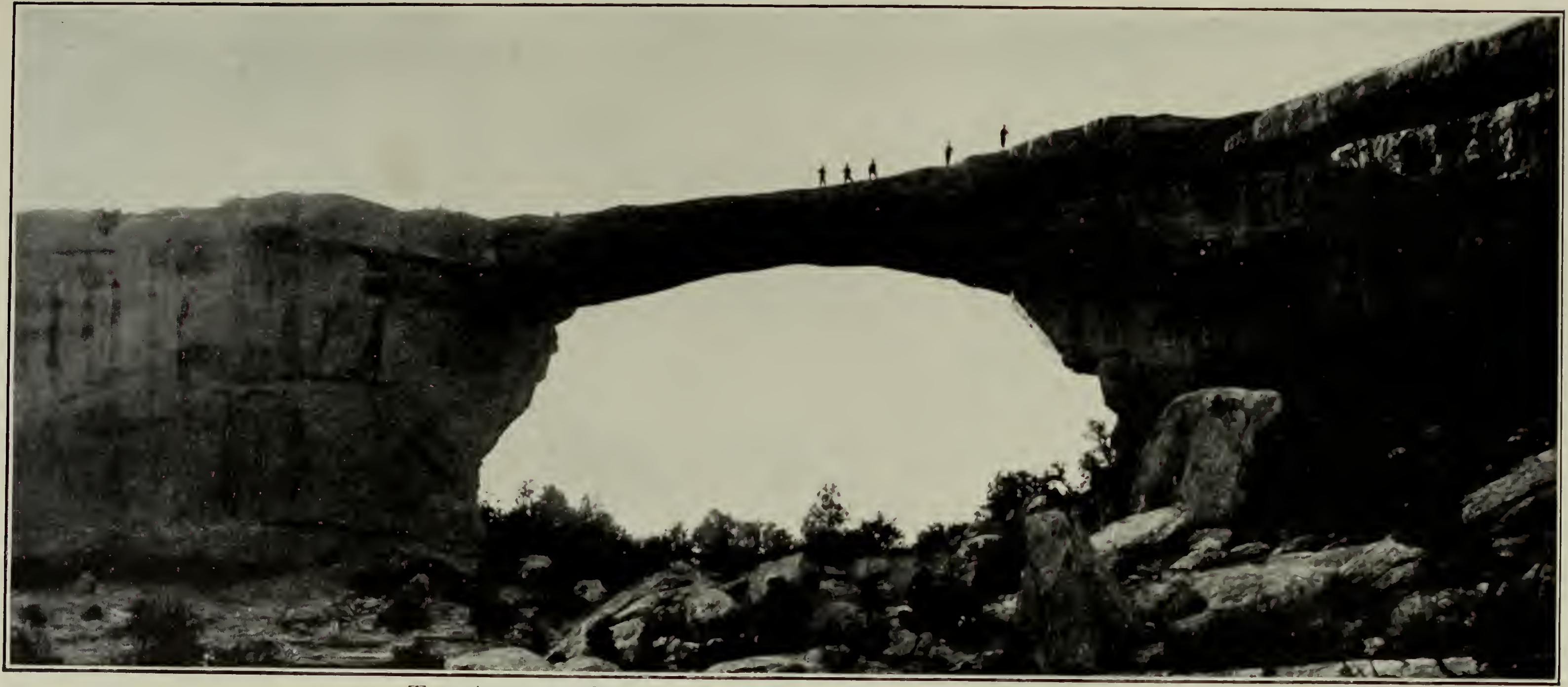
## DEVILS TOWER NATIONAL MONUMENT

THIS extraordinary mass of igneous rock is one of the most conspicuous features in the Black Hills region of Wyoming. The tower is a steep-sided shaft rising six hundred feet above a rounded ridge of sedimentary rocks, about six hundred feet high, on the west bank of the Belle Fourche River. Its nearly flat top is elliptical in outline. Its sides are strongly fluted by the great columns of igneous rock, and are nearly perpendicular, except near the top, where there is some rounding; and near the bottom, where there is considerable outward flare. The tower has been scaled in the past by means of special apparatus, but only at considerable risk.

The great columns of which the tower consists are mostly pentagonal in shape, but some are four or six sided.



The Devils Tower, Wyoming

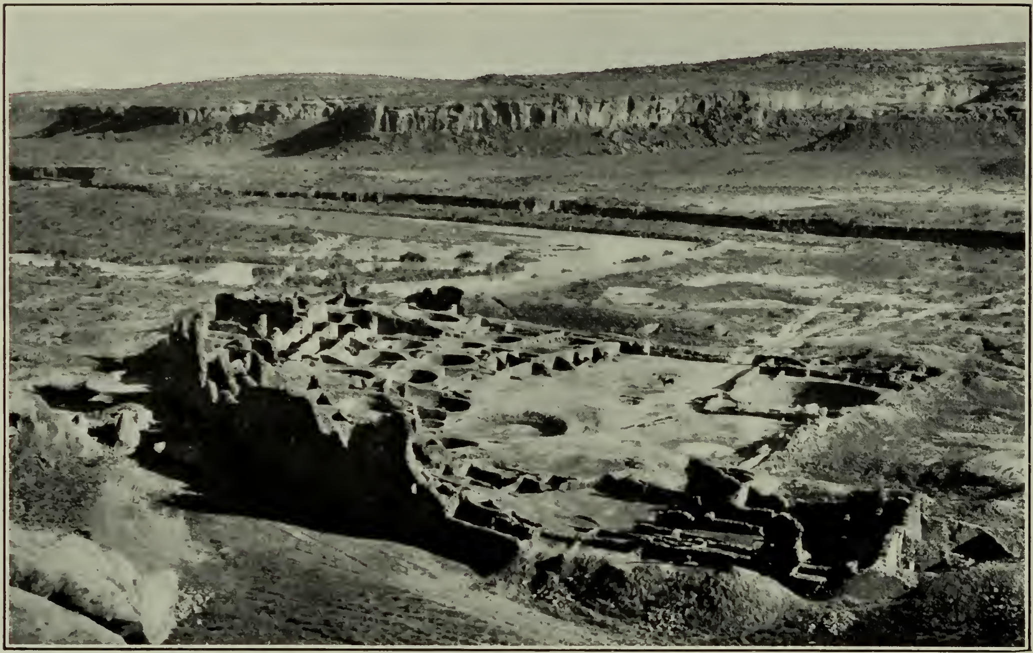


The Augusta, One of Utah's Magnificent Natural Bridges

## NATURAL BRIDGES NATIONAL MONUMENT

THE natural bridges for whose preservation this national monument in San Juan County, Utah, was created are understood to be among the largest examples of their kind, the greatest of the three having a height of two hundred and twenty-two feet, and a thickness of sixty-five feet at the top of the arch. The arch is one hundred and twenty-eight feet wide, the span two hundred and sixty-one feet, and the height of the span one hundred and fifty-seven feet. The other two bridges are a little smaller. All occur within about five miles. The whole constitutes an imposing spectacle. The bridges are the result of stream erosion in an elevated region.

In the neighborhood are found, in addition to a couple of fine cavern springs and other interesting and scientifically valuable natural curiosities, many prehistoric ruins of cavern and cliff dwellings.



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## THE CHACO CANYON NATIONAL MONUMENT

THE Chaco Canyon National Monument preserves remarkable relics of a prehistoric people once inhabiting New Mexico. Here are found numerous communal or pueblo dwellings built of stone, among which is the ruin known as Pueblo Bonito, containing, as it originally stood, twelve hundred rooms. It is the largest prehistoric ruin in the Southwest.

Interesting exploration and excavation work among the ruins has been carried on by the National Geographic Society.

## SHOSHONE CAVERN NATIONAL MONUMENT

A FEW miles east of the celebrated Shoshone Dam, in Wyoming, is found the entrance to the picturesque Shoshone Cavern. Some of the rooms are a hundred and fifty feet long and forty or fifty feet high, and all are remarkably encrusted with limestone crystals. The passages through the cavern are most intricate, twisting, turning, doubling back, and descending so abruptly that ladders are often necessary.

## COLORADO NATIONAL MONUMENT

THIS area, near Grand Junction, Colorado, is similar to that of the Garden of the Gods at Colorado Springs, only much more beautiful and picturesque. With possibly two exceptions it exhibits probably as highly colored, magnificent, and impressive examples of erosion, particularly of lofty monoliths, as may be found anywhere in the West. These monoliths are located in several tributary canyons. Some of them are of gigantic size; one over four hundred feet high is almost circular and a hundred feet in diameter at base.

## LEWIS AND CLARK CAVERN NATIONAL MONUMENT

THE feature of this national monument is a limestone cavern of great scientific interest because of its length and because of the number of large vaulted chambers it contains. It is of historic interest, also, because it overlooks for more than fifty miles the Montana trail of Lewis and Clark.

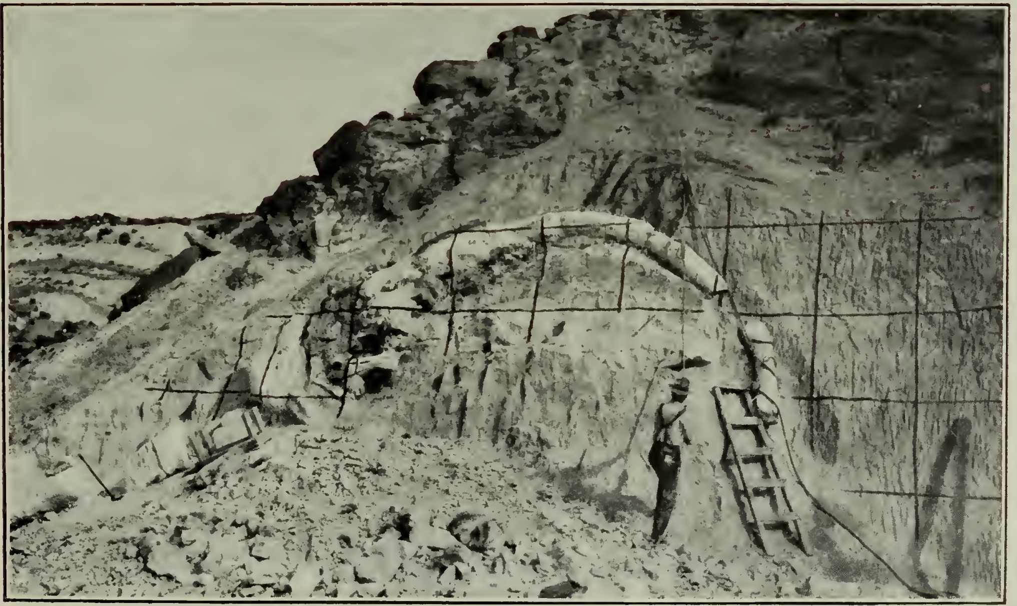
The vaults of the cavern are magnificently decorated with stalactite and stalagmite formations of great variety of size, form, and color, the equal of, if not rivaling, the similar formations in the well-known Luray caves in Virginia. The cavern has been closed on account of depredations of vandals.

## THE DINOSAUR NATIONAL MONUMENT

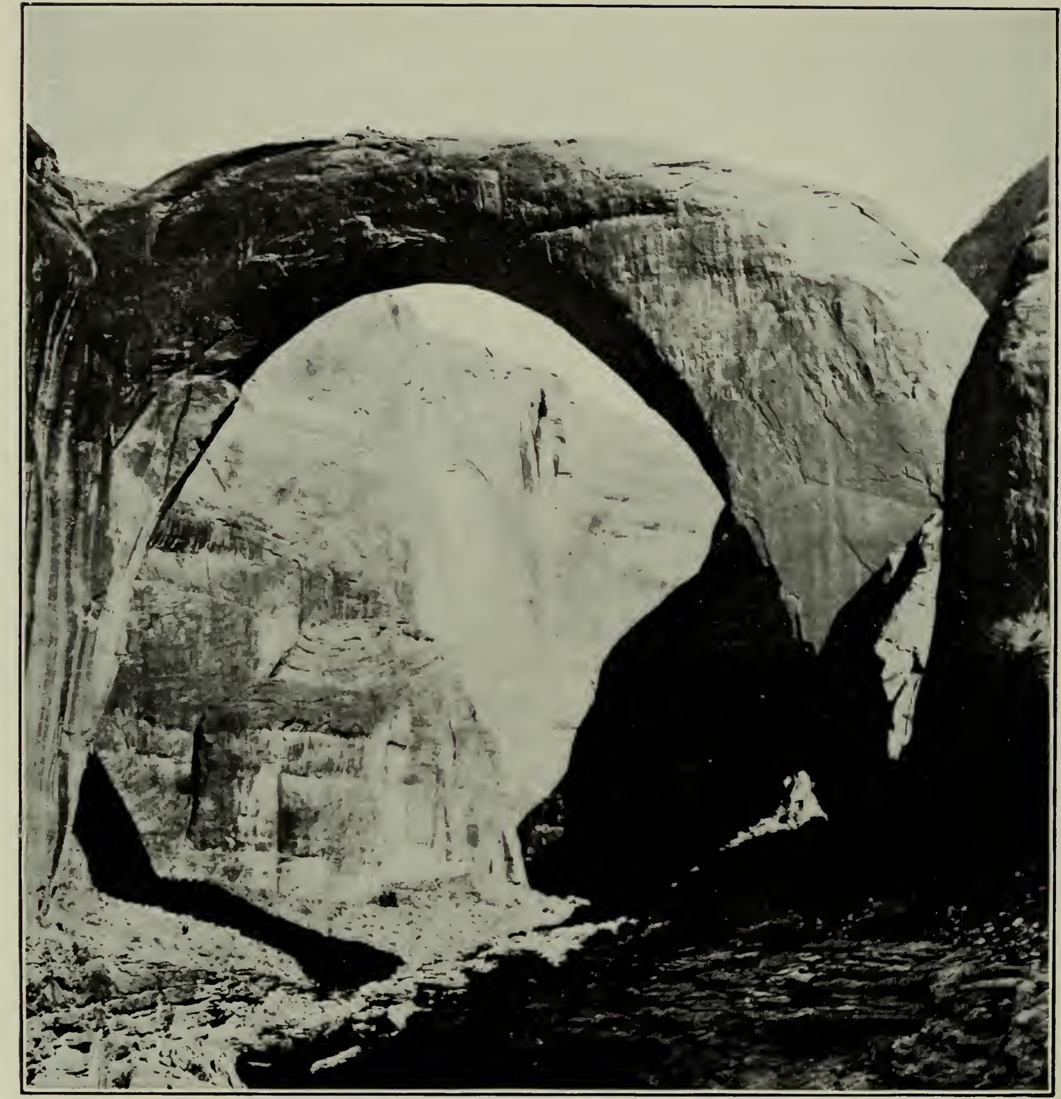
THE Dinosaur National Monument in northeastern Utah was created to preserve remarkable fossil deposits of extinct reptiles of great size. The reservation contains eighty acres of Jura-Trias rock.

For years prospectors and residents had been finding large bones in the neighborhood, and in 1909 Prof. Earl B. Douglass, of the Carnegie Museum of Pittsburgh, under a permit from the Department of the Interior, undertook a scientific investigation. The results exceeded all expectation. Remains of many enormous animals which once inhabited what is now our Southwestern States have been unearthed in a state of fine preservation. These include complete and perfect skeletons of large dinosaurs.

The chief find was the perfect skeleton of a brontosaurus eighty-five feet long and sixteen feet high which may have weighed, when living, twenty tons.



UNEARTHING THE SKELETON OF A GIANT DINOSAUR OF PREHISTORIC DAYS



# RAINBOW BRIDGE NATIONAL MONUMENT

THIS natural bridge is located within the Navajo Indian Reservation, near the southern boundary of Utah, and spans a canyon and small stream which drains the northwestern slopes of Navajo Mountain. It is of great scientific interest as an example of eccentric stream erosion.

Among the known extraordinary natural bridges of the world, this bridge is unique in that it is not only a symmetrical arch below but presents also a curved surface above, thus suggesting roughly a rainbow. Its height above the surface of the water is three hundred and nine feet and its span is two hundred and seventy-eight feet.

The bridge and the neighboring canyon walls are gorgeously clothed in mottled red and yellow. It was first seen by white men in August, 1909, when Professor Byron Cummings, John Wetherill, and William B. Douglass visited it under the guidance of an Indian boy.

## THE CASA GRANDE NATIONAL MONUMENT

ONE of the best preserved and most interesting ruins in the Southwest has been preserved in this reservation, which is near Florence, Arizona. The structure was once at least four stories high. Many mounds in the neighborhood indicate that it was one of a large group of dwellings of some importance. The ruin was discovered by the intrepid Jesuit missionary, Father Eusebio Francisco Kino, at the end of the seventeenth century.

## EL MORRO NATIONAL MONUMENT

EL MORRO, or Inscription Rock, in western central New Mexico, is an enormous sandstone rock rising a couple of hundred feet out of the plain and eroded in such fantastic form as to give it the appearance of a castle.

The earliest inscription is dated February 18, 1526. Historically the most important inscription is that of Juan de Oñate, a colonizer of New Mexico and the founder of the city of Santa Fe, in 1606. It was in this year that Oñate visited El Morro and carved this inscription on his return from a trip to the head of the Gulf of California. There are nineteen other Spanish inscriptions.

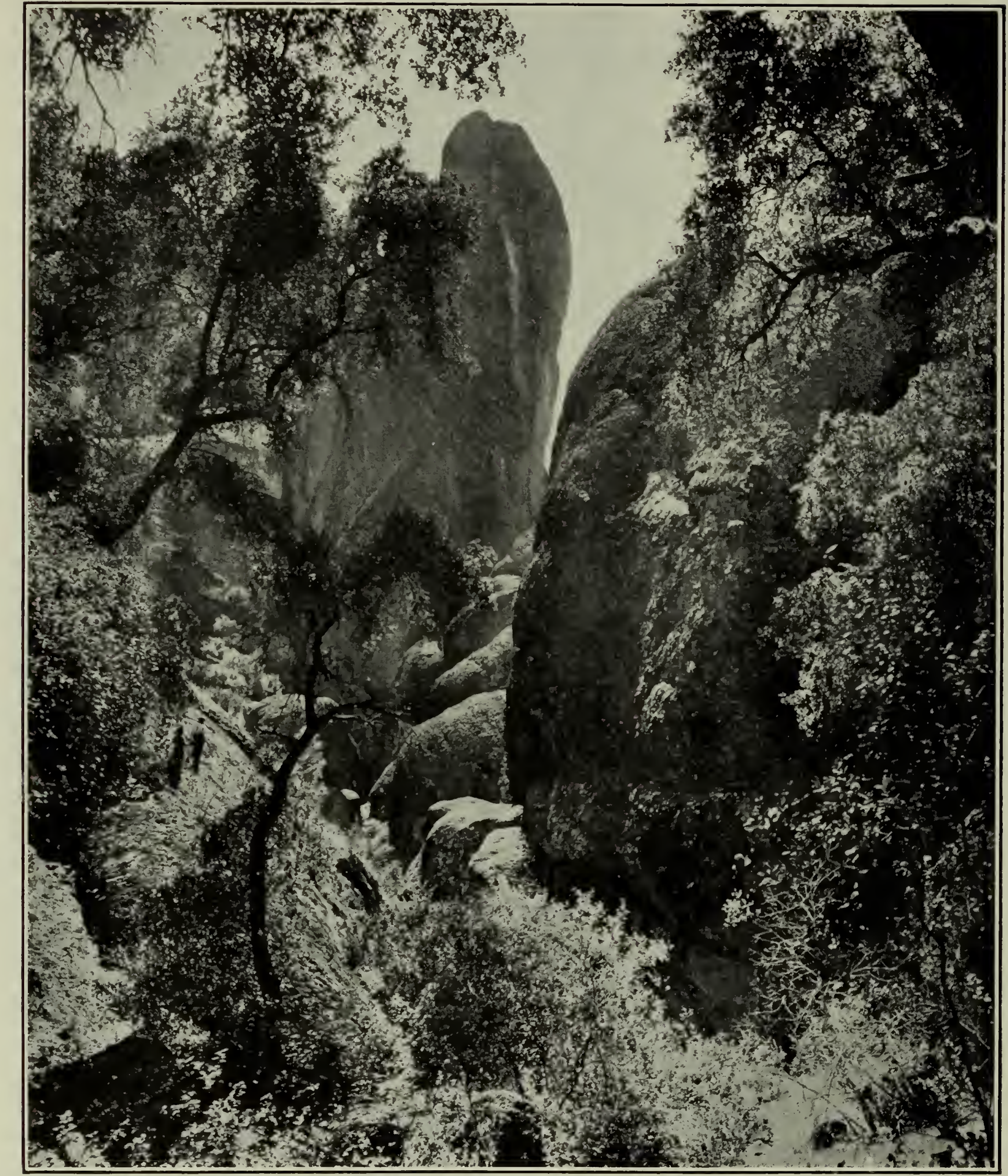
## CAPULIN MOUNTAIN NATIONAL MONUMENT

CAPULIN MOUNTAIN is a volcanic cinder cone of recent origin, six miles southwest of Folsom, New Mexico. It is the most magnificent specimen of a considerable group of craters. Capulin has an altitude of eight thousand feet, rising 1,500 feet above the surrounding plain. It is almost a perfect cone.

## VERENDRYE NATIONAL MONUMENT

FROM the left bank of the Missouri River, at Old Crossing, North Dakota, rises an impressive eminence from which the great plains west of the Rockies doubtless were first seen by civilized man. Crowhigh Butte is the second highest elevation in the State. It is conserved by presidential proclamation under the title of Verendrye National Monument.

Verendrye, the celebrated French explorer, started from the north shore of Lake Superior sixty years before the Lewis and Clark expedition, passed westward and southwestward into the unknown regions of the plains and the mountains, and, about 1740, stood upon the summit of this striking butte.



THE NEEDLES, PINNACLES NATIONAL MONUMENT

## PINNACLES NATIONAL MONUMENT

THE spires, domes, caves, and subterranean passages of the Pinnacles National Monument in San Benito County, California, are well worth a visit. The name is derived from the spirelike formations arising from six hundred to a thousand feet from the floor of the canyon forming a landmark visible many miles in every direction.

A series of caves, opening one into the other, lie under each of the groups of rock. These vary greatly in size, one in particular, known as the Banquet Hall, being about a hundred feet square, with a ceiling thirty feet high.

## THE TUMACACORI NATIONAL MONUMENT

THE Tumacacori National Monument in Santa Cruz County, Arizona, was created to preserve a very ancient Spanish mission ruin dating, it is thought, from the latter part of the sixteenth century. It was built by Jesuit priests from Spain and operated by them for over a century.

After the year 1769 priests belonging to the order of Franciscan Fathers took charge of the mission and repaired its crumbling walls, maintaining peaceable possession for about sixty years, until driven out by Apache Indians.

## GRAN QUIVIRA NATIONAL MONUMENT

THE Gran Quivira has long been recognized as one of the most important of the earliest Spanish church or mission ruins in the Southwest. It is in central New Mexico. Near by are numerous Indian pueblo ruins, occupying an area many acres in extent, which also, with sufficient land to protect them, was reserved. The outside dimensions of the church ruin, which is in the form of a short-arm cross, are about forty-eight by one hundred and forty feet, and its walls are from four to six feet thick and from twelve to twenty feet high.

## NAVAJO NATIONAL MONUMENT

THIS tract encloses three interesting and extensive prehistoric pueblos or cliff-dweller ruins in an excellent state of preservation. These are known as the Betatakin, the Keet Seel, and Inscription House.

Inscription House Ruin, on Navajo Creek, is regarded as extraordinary, not only because of its good state of preservation, but because of the fact that upon the walls of its rooms are found inscriptions written in Spanish by early explorers and plainly dated 1661. This monument is in Arizona.

## THE PETRIFIED FOREST OF ARIZONA

THE Petrified Forest National Monument lies in the area between the Little Colorado River and the Rio Puerco, fifteen miles east of their junction. This area is of interest because of the abundance of petrified coniferous trees. It has exceptional scenic features also.

The trees lie scattered about in great profusion; none, however, stands erect in its original place of growth, as in the Yellowstone National Park.

The trees probably at one time grew beside an inland sea; after falling they became water-logged, and during decomposition the cell structure of the wood was entirely replaced by silica from sandstone in the surrounding land.

## SITKA NATIONAL MONUMENT, ALASKA

THIS monument reservation is situated about a mile from the steamboat landing at Sitka, Alaska. Upon this ground was located formerly the village of a warlike tribe—the Kik-Siti Indians—where the Russians under Baranoff in 1802 fought and won the " decisive battle of Alaska " against the Indians and effected the lodgment that offset the then active attempts of Great Britain to possess this part of the country. The Russian title thus acquired to the Alexander Archipelago was later transferred to the United States.

A celebrated "witch tree" of the natives and sixteen totem poles, several of which are examples of the best work of the savage genealogists of the Alaska clans, stand sentrylike along the beach.

## AZTEC RUIN NATIONAL MONUMENT

AZTEC RUIN, the principal feature of this New Mexico monument, is a large E-shaped structure of pueblo type containing approximately five hundred rooms. The first story of the building is standing, and portions of the second and third stories. The ceilings are supported by large beams, cut and dressed with stone tools, which are interesting exhibits of work done in the Stone Age. The sandstone walls, reasonably plumb and with dressed faces, take high rank as examples of prehistoric masonry.

The plot of ground bearing the ruins was presented to the United States by the American Museum of National History through the generosity of Mr. Archer M. Huntington, one of its trustees.

## SCOTTS BLUFF NATIONAL MONUMENT

THIS national monument in the State of Nebraska is rich in historic interest. Scotts Bluff, one of the highest known points in the State, was a well-known landmark on the Old Oregon Trail, and along this way passed a vast concourse of the pioneers that trailed overland on their way to settle the Willamette Valley and Puget Sound regions in Oregon and Washington, to hunt for gold in distant California, or to found the Mormon colonies of Utah. In the days of the pony express Scotts Bluff was the scene of many Indian battles. It is estimated that about the middle of the nineteenth century an average of one wagon every five minutes passed through Mitchell Pass, which is located within the boundaries of the present monument.

## PIPE SPRING NATIONAL MONUMENT

PIPE SPRING, on the main road between Zion National Park and the North Rim of the Grand Canyon, forms a welcome oasis in the Arizona desert. This spring was famous in the early pioneer life of Utah and Arizona. Here in the early sixties the Mormon Church established a cattle ranch, and the ruined old stone fort they erected, known as Windsor Castle, is the principal feature of the monument.

## YUCCA HOUSE NATIONAL MONUMENT

THIS monument was established to preserve the ruin of a prehistoric village in southwestern Colorado. The village is now a cluster of mounds with no sign of a wall rising above their surfaces. On account of the large size and extent of the mounds, it is believed that when excavated they will prove of great archeological interest and educational value. The land upon which the ruins are situated, approximately 10 acres in extent, was donated to the United States Government by Henry Van Kleek, of Denver, Colorado.

## FOSSIL CYCAD NATIONAL MONUMENT

IT WAS to protect its large deposits of fossil cycads, fernlike plants of the Mesozoic period, that this area in the Black Hills of South Dakota was made a national monument. These fossil plant beds are among the most interesting yet discovered, with the most perfectly preserved specimens. Scientific investigations show that the cycads, which are of tree-fern type, actually bore flowers in the age when egg-laying monsters were still extant. Many of the fossil tree trunks contain large numbers of unexpanded buds, while in other cases are found fruits that had begun to mature before fossilization set in.

## CRATERS OF THE MOON NATIONAL MONUMENT

THE Craters of the Moon National Monument, in Idaho, is a volcanic region, the most recent example of fissure eruption in the United States. As its name signifies, it closely resembles the surface of the moon when seen through a telescope. Nowhere else in the United States can so many volcanic features be found in so small an area. There is a profusion of cinder cones, craters, and hornitos, and huge black fields of lava spread out for miles. The lava tunnels and caves are especially interesting, with their beautiful blue and red lava stalactites and stalagmites and other unusual formations.

Craters and Cones Rising from the Lava Fields

*Courtesy of the National Geographic Society*

A View of Glacier Bay

## GLACIER BAY NATIONAL MONUMENT

THE Glacier Bay region of Alaska contains tidewater glaciers of the first rank in a setting of lofty peaks. Because of the unique opportunity afforded here for the scientific study of glacial action, of the resulting movements and development of flora and fauna, and of certain valuable relics of ancient interglacier forests, a portion of this area was set aside as the Glacier Bay National Monument.

The region also contains a great variety of forest covering consisting of mature area, bodies of youthful trees which have become established since the retreat of the ice, and great stretches, now bare, that will become forested in the course of the next century. These should be preserved in their natural condition. The monument is also of historic interest, having been visited by explorers and scientists since the early voyage of Vancouver in 1794.

## WUPATKI NATIONAL MONUMENT

THE Wupatki Monument consists of two tracts of land lying west of the Little Colorado River in Arizona, on which are located interesting red-sandstone pueblos built by the ancestors of the Hopi, one of the most picturesque tribes of Indians in the United States to-day. The buildings were constructed by the Snake family of the Hopi in their migration from the Grand Canyon.

## ARCHES NATIONAL MONUMENT

NATURAL arches, caves, castlelike piles, window openings, and bridges, are among the rock creations preserved in the Arches National Monument, in southeastern Utah.

Utah is noted for its erosional features. Most of them, however, are carved by running water. In the Arches area the fantastic and bizarre rock effects were produced by the hot desert winds, aided by the occasional rains that occur even in this nearly arid country.

## HOVENWEEP NATIONAL MONUMENT

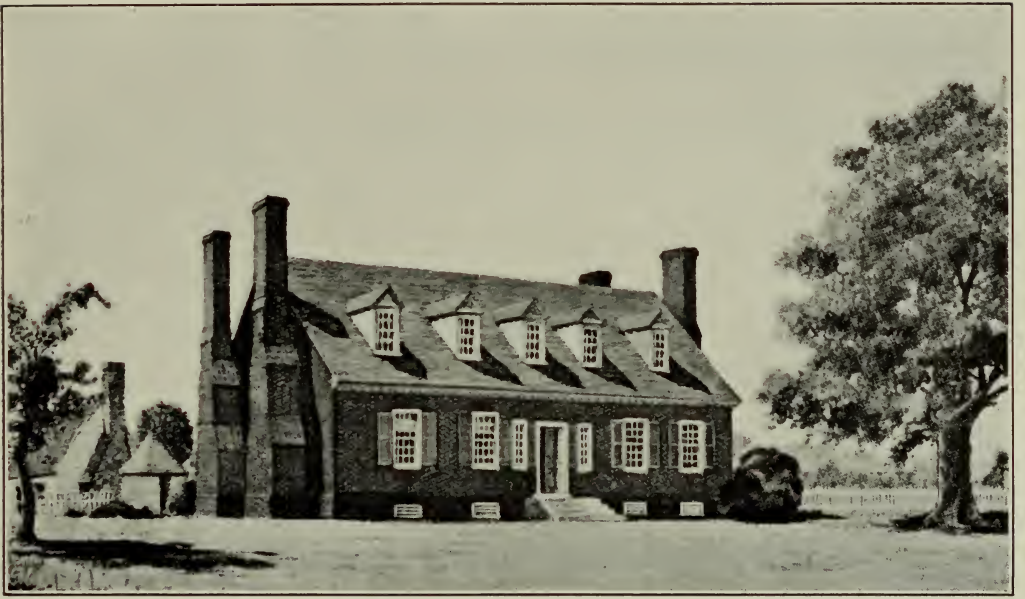
THIS national monument in Utah and Colorado contains four groups of remarkable prehistoric towers, pueblos, and cliff dwellings. In the largest group there are eleven different buildings. The largest of these, Hovenweep Castle, has walls that measure sixty-six feet long and twenty feet high. Besides towers and great rooms, this building has two circular kivas on the east end identical in construction with those found in the ruins of Mesa Verde National Park.

## CANYON DE CHELLY NATIONAL MONUMENT

ARCHEOLOGISTS consider the ruined cliff dwellings in Canyon de Chelly National Monument in Arizona among the most important of all the ruins so far discovered in the Southwest. Cliff dwellings located in protected caves and crevasses high above the base of the red sandstone cliffs contain records of cultural progress covering a longer period than found in any of the other ruins so far discovered in that section.

Canyon de Chelly also contains much of scenic interest. A box canyon probably 25 miles in length, it is joined by several lateral canyons, and the walls of red sandstone, some perpendicular or even overhanging, rise 700 to 1,000 feet from the stream bed. The monument lies within the Navajo Indian Reservation and was established in 1931.

# GEORGE WASHINGTON BIRTHPLACE NATIONAL MONUMENT



Plan from which Old Homestead at Wakefield is Being Restored

UNUSUALLY rich in historic associations is the George Washington Birthplace National Monument, at Wakefield, Virginia. Although reserved primarily as the place where our first President was born, its history goes back much farther than that.

Within the bounds of the national monument are the foundations of the house bought in 1664 by that John Washington who had come from England eight years before, to establish a family that proved worthy of its English forebears, who have been traced definitely back to the eleventh century. This first of the American Washingtons played an important part in founding the colony which his great grandson George was one day to lead to national independence.

Near the foundations of John Washington's old house are the family burial grounds, containing his grave and also those of George Washington's father and grandfather, and numerous other kin.

The homestead in which George was born, built by his father Augustine Washington and later left by him to an older son, was burned on Christmas Day, 1780, and never rebuilt. Portions of the foundations were found still in place, and from them, and from old records, plans for the rebuilding of the old manor house were drawn.

Work on the rebuilding of the house itself and the ancient detached kitchen is now in progress, from bricks made by hand from local clay, as in the case of the original house. Colonial gardens also are being planted in an effort to attain the appearance of a typical colonial Virginia estate. It is planned to complete the rehabilitation of the old homestead before the opening of the Bicentennial Celebration of the Birth of George Washington in 1932.

To the Wakefield National Memorial Association, of which Mrs. Harry Lee Rust, sr., is president, goes the credit for the preservation of Wakefield. Congress has recognized this fact by delegating to the Association the rehabilitation work, in cooperation with the National Park Service and the National Commission of Fine Arts.

## COLONIAL NATIONAL MONUMENT

THREE areas of prime historic importance are included in the Colonial National Monument, in Virginia. One is Jamestown Island, where the first permanent English settlement in America was made in 1607. Representative Government in America was organized here. Here, too, was the scene of the first American legislative assembly, and of the first trial by jury in this country.

Williamsburg, the second of the monument areas, was the seat of government of Colonial Virginia for almost a century, during the period of greatest colonial development. In this old town the first public school in America was established. Its William and Mary College, a prominent educational force in modern life, was one of the first American educational institutions. Recognizing the importance of Williamsburg, both from a cultural and an educational standpoint, John D. Rockefeller, jr., is now engaged in restoring the ancient city to its colonial appearance.

Yorktown, the third main area of the monument, was the scene of the culminating battle of the Revolution. It was here with the surrender of Lord Cornwallis on October 19, 1781, that the Colonial period ended. Yorktown has gone down in history as the spot on which the English principle of liberty was vindicated for all time.

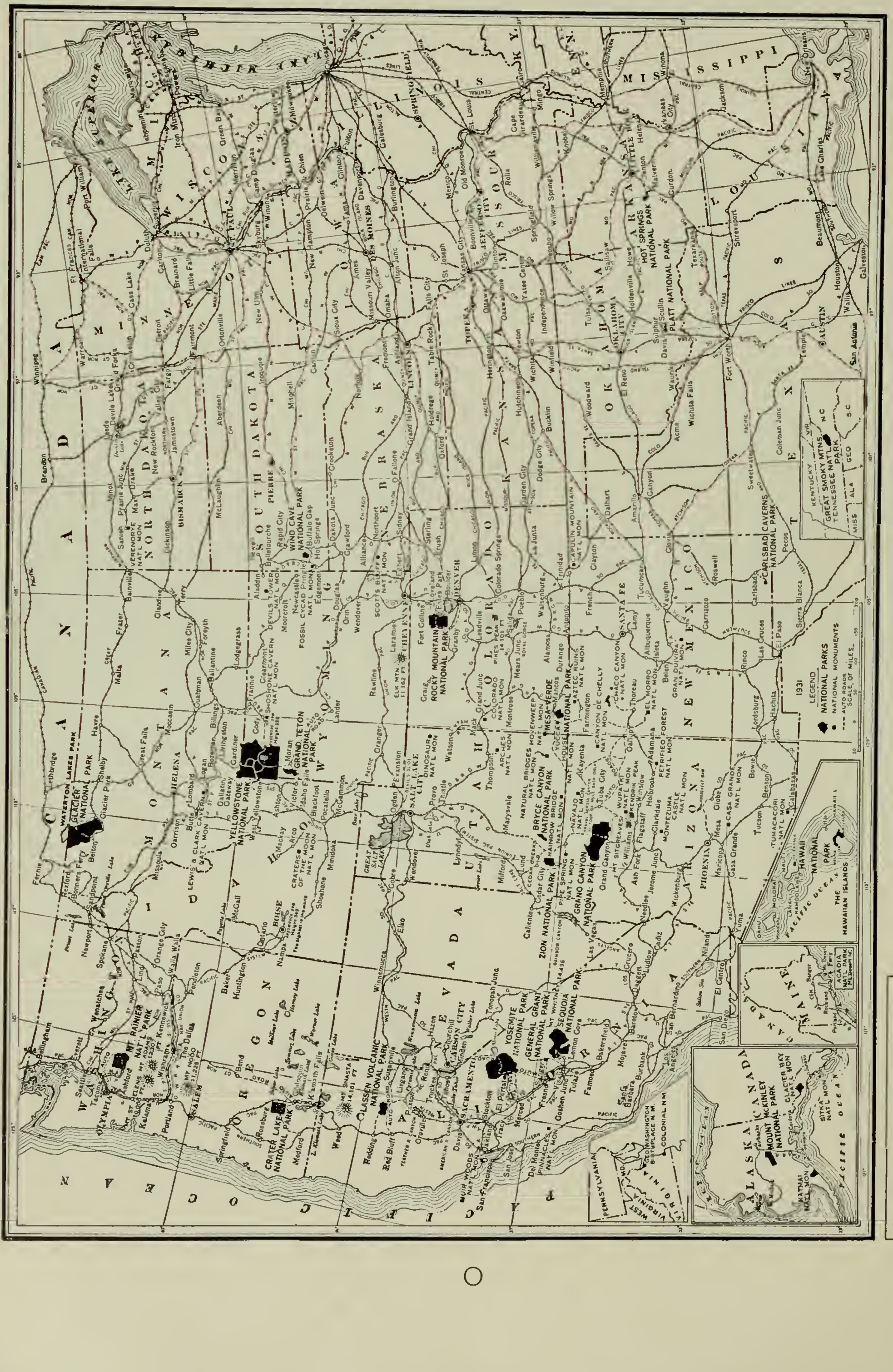
The task of restoring these areas to their original appearance is a unique and fascinating one. The historic old church at Jamestown has been restored by the Association for the Preservation of Virginia Antiquities. In the ruined building and the surrounding churchyard are many old memorial tablets which stimulate the imagination and link with vividness the past and the present.

A parkway connecting these three historic areas is also included in the national monument. In places it follows stretches of the James and York Rivers, which in colonial days were important lanes of communication.

Such extensive restoration work as has taken place in the Williamsburg area requires millions of bricks. This need created a problem which aroused much public interest. The bricks in the early houses naturally were made by hand. They were slightly larger than those used in present-day architecture. The use of commercial bricks would have spoiled the attractiveness of the restored houses. So, with much difficulty, a man in North Carolina, who had a force of colored laborers skilled in the art of old-time brickmaking by hand, was located and brought to Williamsburg, where the necessary bricks were made on the ground, of native clay.

*Photograph by The Norfolk-Portsmouth Advertising Board*

Old Church at Jamestown Preserved Through the Splendid Work of The Association for the Preservation of Virginia Antiquities



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